PARTS OF THE ORIGINAL DOCUMENT

ARE OF POOR REPRODUCTIVE QUALITY

CERTAINES PARTIES DU DOCUMENT ORIGINAL

SONT DE PIÈTRE QUALITÉ DE REPRODUCTION

Annual Report

HYDRO-QUÉBEC...

- generates electricity: 128.1 billion kilowatthours in 1986;
- transmits and distributes electricity: 123,783 kilometres of transmission and distribution lines in a 1.5-million-square-kilometre territory;
- supplies virtually all electricity consumed in Québec: sales of 117.2 billion kilowatthours and revenue of $4,024 million in 1986; 2.9 million customers, including more than 13,000 industrial firms;
- exports electricity to Ontario, New Brunswick and the United States: in 1986, 26.9 billion kilowatthours, worth $649 million in revenue;
- ranks at the forefront of electrical research and new technology;
- acts as a consultant, sharing its know-how in more than 20 countries;
- employs a permanent staff of 18,470.

Gouvernement du Québec
Office of the Minister of Energy and Resources

Québec City, May 6, 1987

Mr. Pierre Lorrain
President of the National Assembly
Québec City

Dear Sir,

I have the honor of presenting to you the annual report of Hydro-Québec for the year ended December 31, 1986.

Yours respectfully,

John Ciaccia
Minister of Energy and Resources

FACTS IN FIGURES: 1977-1986

Financial indicators*
(Millions of dollars)

	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Total assets	**30,588**	29,183	27,129	25,179	23,162	20,700	18,009	15,485	12,833	10,621
Long-term debt	**20,349**	20,123	18,326	16,453	15,628	13,713	12,107	10,354	8,897	7,552
Shareholder's equity	**7,023**	6,720	6,511	6,366	5,719	4,926	4,374	3,628	2,882	2,359
Investment	**1,537**	1,615	1,681	2,248	2,546	2,668	2,592	2,818	2,588	1,956
Revenue from sales of electricity	**4,673**	4,423	4,101	3,593	3,257	2,770	2,413	1,956	1,600	1,263
Net income	**303**	209	301	707	800	559	746	746	523	382

Operating statistics

Installed capacity** *(Megawatts)*	**24,475**	23,510	23,480	21,301	19,142	18,552	16,862	14,475	12,979	12,523
Sales of electricity *(Billions of kilowatthours)*	**144.1**	133.9	123.8	107.7	103.6	106.9	104.0	97.0	92.6	87.5
Total number of customer accounts *(Thousands)*	**2,862**	2,784	2,697	2,644	2,565	2,504	2,416	2,372	2,318	2,265

* *These indicators are taken from the consolidated financial statements, which contain the financial statements of Hydro-Québec and its subsidiaries.*

** *In addition to its own installed capacity, Hydro-Québec has access to most of the generation of the Churchill Falls power plant, which has a nominal capacity of 5,225 megawatts.*

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THE SYSTEM

MESSAGE FROM THE CHAIRMAN OF THE BOARD AND THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

At Hydro-Québec, 1986 was a year of consolidation and planning. As the 1990s approach with new risks and challenges, the utility is further strengthening its commercial and financial position and preparing the ground for its future development.

Thus, in 1986, Hydro-Québec entered a new phase of marketing strategy with a change in priority from sales of surplus electricity to development of new long-term markets. In Québec, this meant reinforcing its position on the industrial market where the potential for electrification remains enormous. A large number of agreements were signed for the implementation of electrotechnologies in various industrial sectors. And risk and profit sharing formulas were introduced to sustain the expansion of large-power customers already located in Québec and attract new companies, primarily in the key sectors of Québec industry.

Also in 1986, Hydro-Québec formulated a marketing policy that defines its orientations in matters of service quality. Consequent tailoring of services to the specific needs of the various customer categories will entail careful revision of business practices and introduction of new tools of communication and interaction.

On the export front, Hydro-Québec intensified negotiations with neighboring systems in Canada and the United States with the view to concluding new contracts for the sale of long-term blocks of firm power and energy. An important letter of intent was signed with Central Maine Power Company for delivery of 122 billion kilowatthours of firm energy between 1992 and 2020. In contrast to sales of surplus energy, these contracts for the sale of firm power and energy will enable Hydro-Québec to realize a profit, once the corresponding debt is serviced, and to obtain a higher return on equity.

At year-end, the volume of sales in Québec showed a gain of 6.8% and the volume of export sales, 11.3%. These results reconfirm the success of the marketing action launched in 1982 and the popularity of electricity among all categories of customer.

MAIN FINANCIAL RESULTS

Net income:
$303 million

Sales revenue:
$4.7 billion
(5.7% increase)

Return on equity:
4.4%
(1.2% increase)

Total expenditure:
$2.0 billion

Operating expenses:
$1.1 billion
(2.9% decrease)

Work on augmenting system reliability and profitability continued. And programs to modernize and improve facilities moved ahead on schedule. Special effort was devoted to development of interconnections, in the area of research as well as engineering. Moreover, in conformity with the orientation set forth in its Development Plan 1986-1988, Horizon 1995, the utility introduced various supply management methods designed to increase the production capacity of generating facilities. The objective here is to maximize use of existing resources before embarking on new capital spending, and thus hold down capital expenditures in coming years.

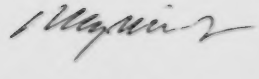
It was a fruitful year, too, in the area of labor relations, with the renewal of seven collective agreements affecting more than 14,000 employees. The support of all employees for our objectives of rationalization and development was remarkable, giving the directors and management sound reason to look to the future with confidence.

And what does that future hold for us? Our principal challenges will lie in the areas of marketing and finance. The utility must optimize the use of electricity in all sectors where it can promote the modernization and competitiveness of the Québec economy. This will require a flexible rates policy that could lead the utility to assume additional short-term risks (temporary adjustment of rates, installation of new equipment to penetrate certain markets, risk and profit sharing) with the perspective of long-term development and profitability. Hydro-Québec must therefore re-establish its financial margin of manoeuvre by continuing cost-cutting efforts both in installations and financial management, and must improve its financial ratios.

The progress of recent years has placed us in the right direction. And we know we can count on two certainties that will become even more evident in coming years: the quality of our product and the dynamism of our workforce.

In concluding this overview, we wish to sincerely thank the 18,470 Hydro-Québec employees for the competence and energy they demonstrated throughout the year.

We also wish to express our gratitude to the members of the Board of Directors and to Messrs. Michel Caron, Michel Grignon and Georges Lafond, senior officers who left the utility in 1986 and whose contribution to the success of Hydro-Québec was greatly appreciated.



A. Hervé Hébert
Chairman of the Board

Guy Coulombe
President and Chief
Executive Officer

April 15, 1987

ACCENT ON CUSTOMER CONCERNS

In 1986 a marketing policy was formulated aimed at matching as closely as possible the utility's resources to its customers' needs. Focusing on customer satisfaction the policy covers, among other things, long-term profitability, the sharing of risks and profits with industry, closer links with customers, and employee mobilization.

Results on all Québec markets were good, with sales volume up 6.8% over 1985.

Toward long-term profitability

The marketing programs introduced since 1982 have succeeded in selling surplus electricity and ensuring short-term profitability. Hydro-Québec has now turned its attention to capturing permanent, specific markets, which are profitable in the long run. While retaining its existing markets, the utility is seeking to promote off-peak electricity consumption and to develop formulas which benefit both the customer and Hydro-Québec.

To this end, in 1986 Hydro-Québec carried out extensive research and consultation to assess the possibility of maintaining present residential dual-energy stock and increasing interruptible-power stock. It also introduced a pilot project to control space and water-heating equipment by remote control; this project will be expanded progressively in 1987.

Various avenues are being explored here. Some enable residential customers to adjust their consumption and benefit financially from doing so, and allow industrial customers to lower certain production costs in order to become more competitive. Others ensure optimum use of generating facilities without a rapid increase in peak-power demand, so that the cost of supplying power can be lowered, and electricity rates kept down.

Risk and profit sharing with industry

Following its rate discount program, in 1986 Hydro-Québec introduced a strategy of sharing risks and profits with large-power industrial customers, whereby it agrees to adjust its revenues over time and assume certain risks in exchange for profit-sharing. Agreements to this effect have already been concluded with firms in a wide range of sectors, including iron and titanium, aluminum, magnesium, chlorates and steel alloys.

Mobilizing for customer service

Successful implementation of Hydro-Québec's marketing policy and achievement of its objectives depend on the cooperation of all employees. An extensive customer-awareness campaign was launched in most administrative units, with additional emphasis on personnel development and training, as these are determining factors in the quality of customer relations and contribute directly to Hydro-Québec's success.

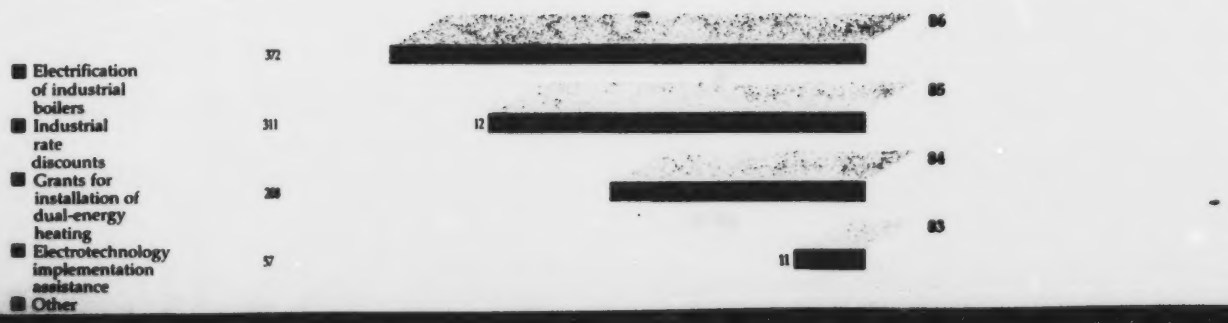
Improved service continuity

Reduction in the number and duration of service interruptions through greater system reliability was one of the objectives of the Development Plan 1986-1988, Horizon 1995. Work to improve service continuity achieved concrete results: the total number of planned interruptions and of power outages on the distribution system dropped by about 25% between 1984 and 1986.

PERSONALIZING CUSTOMER RELATIONS

Hydro-Québec pursued its efforts to improve and personalize customer relations. For example, it tried ways of simplifying transmission of information to customers with hearing and sight disabilities. It set up a procedure for dialogue with consumer associations. And it established regular communications with customers through advertising campaigns and distribution of publications. This new approach also led Hydro-Québec to adapt its marketing practices to its customers' actual needs. It developed a number of procedures to enable it to clarify business relations with customers. It experimented with an improved billing formula for equalized payments tied to preauthorized bank deductions. It also carried out a pilot project so that customers who are absent when the meter reader calls can telephone in the information. And it tested a special device which automatically telephones to notify customers likely to be affected by a planned power interruption.

REVENUE FROM MARKETING PROGRAMS (1983-1986)
(Millions of dollars)



Electrotechnologies: focal point of industrial development

To increase its share of the industrial market, which has enormous potential, Hydro-Québec in 1985 launched its Electrotechnology Implementation Assistance Program, designed primarily to improve industrial processes with a view to increasing the profitability of Québec industries.

Since the program was implemented, some 139 agreements have been signed with firms of all sizes. The agreements represent a total installed capacity of 185 megawatts and total investment of $92.1 million, of which Hydro-Québec has assumed 24.3% ($22.4 million). New industrial processes have been introduced in most sectors including petrochemicals, metallurgy, pulp and paper and agriculture.

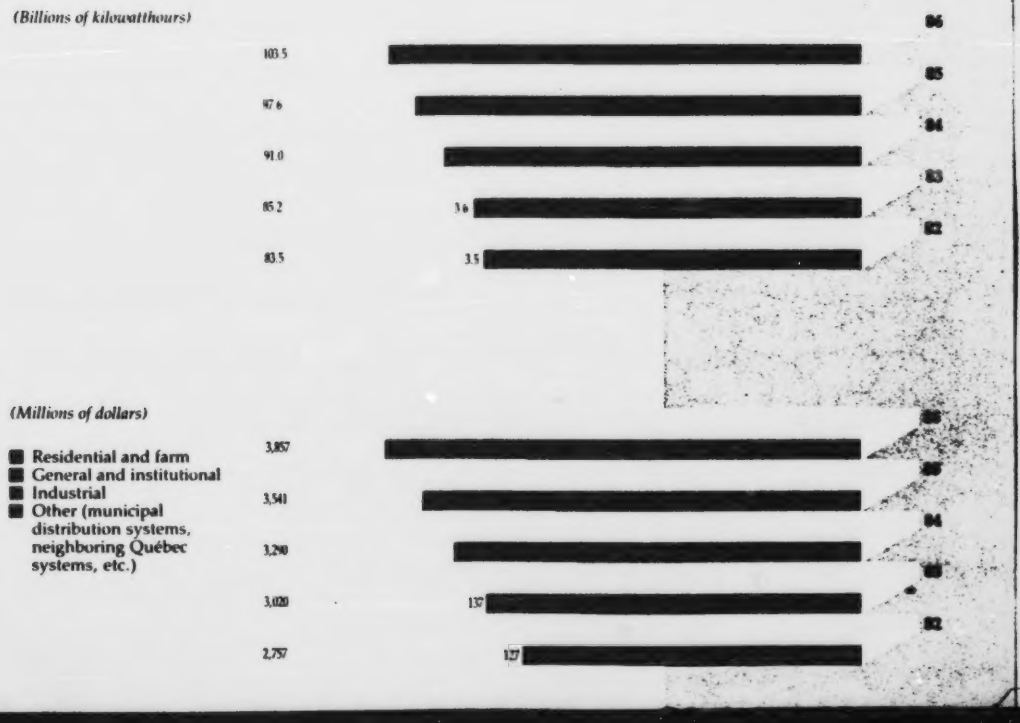
During the year, Hydro-Québec signed an agreement with the École Polytechnique de Montréal, which has led to the creation in Canada of a test laboratory for microwave drying of materials. Further associations of this type in projects involving research and advanced training will strengthen Hydro-Québec's ties with universities and the industrial sector.

Hydro-Québec was an active participant in the Canadian Committee on Electrotechnologies, which held its first conference in Montréal in March 1986. Through the CCE, an international forum, Canadian industries can obtain information on new applications of electricity in production processes.

Increased sales in all Québec sectors

Sales on Québec markets totaled 117.2 billion kilowatthours, a 6.8% increase over 1985, and generated $4,024 million in revenues, up 7.3% over the preceding year.

FIRM ELECTRICITY SALES IN QUEBEC (1982-1986)



The 6.0% upswing in sales of firm electricity was highly satisfactory given the milder temperatures recorded during the year, and prolonged work stoppages in a number of industrial sectors. Revenue from these sales was $3,857 million, an increase of $316 million over 1985, of which $116 million came from the 5.4% rate increase introduced in May.

Sales of surplus electricity rose by 12.8%, although they generated only $167 million, a drop of $42 million against 1985.

■

Residential and farm sector: + 5.5%

Sustained growth in sales in this sector was largely attributable to a boom in housing starts (58,000 units), where the penetration of electric heating reached 93%. Conversions to dual-energy heating in existing homes and apartment buildings — more than 150,000 since the program began — also produced positive results. All-electric heating continued to attract consumers, both in existing and new homes. There was also an increase in average consumption per customer, attributable to a variety of factors. At the end of 1986, nearly 68% of Québec homes were heated with electricity.

Revenue from these sales was up 9.1% over 1985.

■

General and institutional sector: + 6.8%

This was the best growth rate in this sector for several years and reflects the success of the dual-energy program, which has substantially increased the use of electricity in commercial buildings and institutions. This market was extremely active and attracted considerable investment. Revenue from sales of electricity to this market was up 9.4%.

■

Industrial sector: + 6.3%

Results here reflect the revival of industrial activity in most areas. Smelting and refining (especially aluminum), pulp and paper mills (where facilities have been modernized) and chemicals led the way. Revenue from sales on this market was up 8.2% against 1985.

■

Surplus electricity: + 12.8%

This market leveled off in 1986. Most customers who participated in the program for electrification of industrial boilers enjoyed sustained activity. Equipment was used for the anticipated length of time, or even longer in some instances.

Total sales of surplus electricity in Québec reached 13.7 billion kilowatthours, a 12.8% increase over 1985. However, revenue was down 20% from the preceding year, due to the drop in oil prices. Growth in the volume of these sales generated additional revenue of $27 million, although it was insufficient to fully cover the shortfall caused by indexation of the price of surplus electricity to the price of oil.

INTENSIVE MARKETING PAYS OFF

In recent years, Hydro-Québec has actively sought new markets outside Québec. The objective: to ensure optimum development of available hydraulic resources in order to sustain Québec's economic development. In 1986, the volume of electricity deliveries outside Québec increased by 11.3%, reaching a record level of 26.9 billion kilowatthours. These sales generated revenue of $649 million.

Ambitious objectives

In its Development Plan 1986-1988, Horizon 1995, Hydro-Québec set itself the medium-term goal of consolidating penetration of export markets through the sale of blocks of firm power and energy to replace output from thermal and nuclear generating stations planned by neighboring systems. The utility is endeavoring to reach agreements covering an average of 15 years for up to 3,500 megawatts by the year 2000. In 1985, it achieved an important first step in this direction when it signed a firm energy sales agreement for 70 billion kilowatthours between 1990 and 2000 with the New England Utilities. In 1986, it pursued this undertaking by negotiating for the supply of 122 billion kilowatthours of firm energy between 1992 and 2020 to Central Maine Power Company. Both parties ratified a letter of intent in February 1987 and should sign a formal agreement by the end of the year. Intense negotiations were also pursued with other electric utilities in Canada and the United States.

In 1986, Hydro-Québec set up an export advisory committee under the chairmanship of former U.S. Secretary of Defence and Secretary of Energy James Schlesinger, comprising 14 Canadian and American experts in energy, finance and economics. The committee, which met for the first time in June, is responsible for advising Hydro-Québec on essential aspects of its relations with the United States and for providing advice on the energy situation and likely market changes in the U.S. Hydro-Québec's permanent New York office, opened in 1985, continued to consolidate links between the utility and state capitals in the Northeastern United States.

With some 40,000 megawatts of untapped hydroelectric potential, a good part of which can compete advantageously with traditional thermal or nuclear generating stations, Québec is able to offer its Canadian and American neighbors a source of supply of reliable, durable and competitive electricity.

Transmission capacity of interconnections reaches 6,315 megawatts

To fulfil new export agreements and ensure better access to neighboring markets, Hydro-Québec further increased the transmission capacity of its interconnections in 1986, with the commissioning of the Des Cantons-Comerford line, linking Québec to New Hampshire through Vermont (see box). The 690-megawatt direct-current line represents the first phase of development of a link with the New England Power Pool (NEPOOL) which will be extended to Sandy Pond, Massachusetts, and upgraded to 2,000 megawatts by 1990.

At the end of 1986, the simultaneous delivery capacity of interconnections operated by Hydro-Québec totaled 5,415 megawatts.

Record volume of sales

The volume of sales of electricity to neighboring systems in Canada and the United States in 1986 reached 26.9 billion kilowatthours, an 11.3% increase over 1985, and represented 18.7% of Hydro-Québec's total sales.

Export sales generated revenue of $649 million, 3.6% less than in 1985, and accounted for 13.9% of Hydro-Québec's total revenue from electricity sales.

Plunging oil prices caused a decline in the average unit price of a megawatthour, which is tied to the price of fossil fuels. One megawatthour was worth $23.95 in 1986, compared with $27.80 in 1985, a 13.8% drop, while the average price of heavy oil plummeted by nearly 50% in relation to 1985.

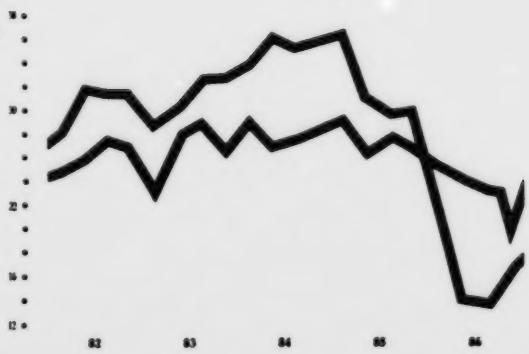
Commissioning of the interconnection with the New England states and the satisfactory performance of interconnections with New York State and Vermont enabled Hydro-Québec to increase the volume of exports to the United States by 31.9% over 1985.

The volume of sales to neighboring Canadian systems declined slightly, from 14.6 billion kilowatthours in 1985 to 14.3 billion kilowatthours in 1986. Deliveries to Ontario

INAUGURATION OF DIRECT-CURRENT INTERCONNECTION WITH NEW ENGLAND

On October 1, Hydro-Québec and its American partners inaugurated Comerford substation in New Hampshire and Des Cantons substation in Québec along with the 690-megawatt ± 450-kilovolt direct-current line linking Hydro-Québec's system to consumption centres served by NEPOOL's member companies. This commissioning marks the first phase in execution of the energy sales, interconnection and energy banking agreements signed in 1983.

CHANGES IN THE AVERAGE PRICE OF OIL AND EXPORTED ELECTRICITY (1982-1986)


Spot price in New York of heavy oil with 2.8% sulphur content (in Canadian dollars per barrel)
Price of electricity exported by Hydro-Québec (in Canadian dollars per megawatthour)
82
83
84
85
86

declined, but because the Madawaska converter substation was in operation during the entire year, sales to New Brunswick were up by more than one billion kilowatthours over 1985.

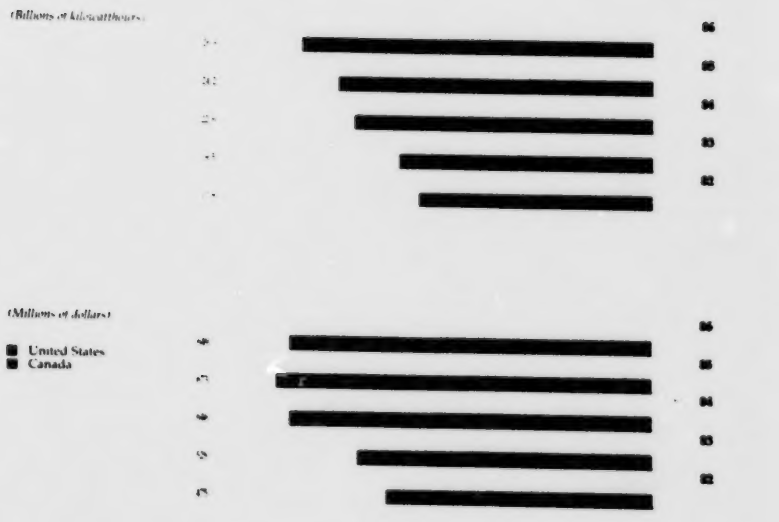
The U.S. market accounted for 46.9% of export sales and generated 58.2% of export revenue; the Canadian market accounted for 53.1% of the volume delivered, and generated 41.8% of total export revenue.

Several new agreements signed

In 1986, Hydro-Québec and its partners signed various agreements, including:

- an agreement with Ontario Hydro covering blocks of power of up to 1,200 megawatts during the winter of 1986-1987;
- an agreement with the New York Power Authority for the delivery of 3 billion kilowatthours a year of firm energy tied to diversified power in 1987 and 1988;
- a seasonal delivery contract with Citizens Utilities in Vermont, covering the supply, during each winter until the end of 1988, of a total of 32 megawatts of power and associated energy, at a load factor of 60%. The contract, which came into effect on December 16, 1986, complements the contract already in effect for the period from March 16 to December 15 of every year;
- an agreement with the Vermont Department of Public Service for the sale of 50 megawatts of firm power and energy between November 1986 and February 1987, thus bolstering Hydro-Québec's sales to Vermont.

EXPORT SALES
(1982-1986)



TOWARD GREATER RELIABILITY AND PROFITABILITY

Hydro-Québec concentrated on three fronts in the area of installations: improving service continuity, developing interconnections and optimizing the operation of power generating facilities, with the goal of increased reliability and profitability.

System improvement forges ahead

At year-end, half the one billion dollars earmarked for improved service continuity had been spent since the four-year program covering transmission, distribution and telecommunications systems and automatic devices was launched in 1984.

Hydro-Québec has now invested 60% of the $400 million allocated to the distribution system under this program. Investments in 1986 were devoted to rebuilding outmoded systems, looping lines and installing protection and switching equipment. Moreover, four of 15 distribution control centres were equipped with automated equipment to be brought into service between 1987 and 1990. The utility also pursued experiments involving remote-feeder control, to restore service to customers more quickly following power outages.

Transmission system automation reached a decisive phase in 1986 when six regional operating centres came into service; three others will begin operation in early 1987, thus completing the network. The program to prevent voltage surges on the transmission system moved ahead during the year. Several 735-kilovolt circuit breakers and about 100 surge arresters were replaced. In 1986, Hydro-Québec also launched a program to replace equipment containing polychlorinated biphenyls (PCBs). More than 5,000 capacitors and 50 transformers were replaced. The program will continue until 1992.

Development of interconnections continues

The Des Cantons-Comerford project was completed, with modification of Nicolet substation and commissioning of Des Cantons substation and the ± 450-kilovolt direct-current link.

TRANSMISSION AND DISTRIBUTION LINES (1982-1986)

(Kilometres)

	1982	1984	1986
Transmission			
735 and 765 kV	8,170	9,870	9,900
± 450 kV	—	—	78
315 kV	3,525	3,650	4,051
230 kV	2,935	3,015	3,014
161 kV	1,520	1,490	1,513
120 kV	5,690	5,590	5,677
49 and 69 kV	3,561	3,904	3,836
	25,401	**27,519**	**28,069**
Distribution (overhead and underground)			
34 kV	700	446	578
25 kV	64,785	72,455	84,047
4 and 12 kV	20,902	17,610	11,089
	86,387	**90,511**	**95,714**

ONE OF THE WORLD'S LONGEST MULTI-TERMINAL DIRECT-CURRENT LINKS

In the early 1990s, Hydro-Québec and NEPOOL will commission the multi-terminal direct-current link, designed to simultaneously satisfy Québec and export-market needs.

This link will rank among the longest of its type in the world, extending nearly 1,500 kilometres between Radisson substation in Québec and Sandy Pond substation in Massachusetts, and including the Des Cantons-Comerford interconnection already in service. It will also be among the most complex systems of its kind, with five converter terminals (hence the name "multi-terminal"), and among the most powerful: 2,000 megawatts at ± 450 kilovolts.

INTERCONNECTIONS WITH NEIGHBORING SYSTEMS (at December 31, 1986)

REINFORCEMENT OF DANIEL JOHNSON DAM

In 1986, Hydro-Québec, in collaboration with an external consulting firm and a committee of internationally renowned experts, studied various solutions for reinforcing the dam. On the worksite, excavation and cleaning of rock at the bottom of arches was undertaken to prepare the foundations for reinforcement. Heated shelters were installed at the bottom of the arches and the stresses the dam is subject to were measured. Work carried out during the year cost $27 million.

Hydro-Québec also moved ahead on the multiterminal Radisson-Nicolet-Des Cantons link. Preliminary studies and reports were completed, as were surveying work, technical surveys and some geotechnical studies. The overall design is almost finalized and the type of transmission tower has been selected. The utility awarded a $315-million turnkey contract for the manufacture and installation of converters at Radisson and Nicolet substations and modification to Des Cantons substation.

Generating facilities: from La Grande 4 to Manic 5

The final units of the La Grande 4 generating station were synchronized with the system in March. This was the finishing touch to phase I of the La Grande complex, which now has a total installed capacity of 10,283 megawatts.

The Manic 5 construction site was officially reopened on May 1 after a hiatus of nearly three years. The additional capacity will comprise four new units totaling 980 megawatts, slated for commissioning in 1989. Concreting of the water inlet was completed and concreting of the generating station begun, and work proceeded on restoring temporary facilities for Hydro-Québec personnel and outside contractors. The project is evaluated at $821 million.

Supply management

Increasing the production capacity of generating facilities and optimizing the exploitation of water reserves were among the supply management objectives in the Development Plan 1986-1988, Horizon 1995. The utility adopted various measures to this end during the year.

La Grande 2 and La Grande 3 were linked to the System Control Centre for load-frequency control. This measure also increased the production of generating stations, in particular, Bersimis 2, Manic 2 and Manic 3, which were already linked to the Centre. Management of the Caniapiscau, Manic 5 and Smallwood reservoirs was improved and efforts were made to operate generating units at peak efficiency, and to better use the effective head of power stations that operate in series.

A program implemented several years ago also contributes to enhancing production capacity. It entails replacing turbine runners, for overall additional capacity of nearly 400 megawatts. The program, which extends until 1999, represents total investment of $194 million.

CRUCIAL FOR THE FUTURE

Technology has always been the focal point of Hydro-Québec's expansion. A concern for efficiency and the inventiveness of the utility's staff led to remarkable achievements in power generation, transmission, distribution, and in telecommunications.

Technology today is even more important. To attain its objectives in terms of quality and efficiency, Hydro-Québec must rely on the innovation and creativity of all personnel, not just its researchers. The challenge is daunting where the quality of service, new industrial applications of electricity, exports, system improvements, environmental protection, and health and safety in the workplace are concerned.

Sustaining system expansion and operations

Research on interconnections and system operation continued to be of primary concern to the Hydro-Québec research institute, IREQ, in 1986.

To help Hydro-Québec choose the method of insulating the sixth line of the James Bay transmission system, which will link Radisson substation to New England, several series of tests and measurements were carried out on site and in the laboratory on the main types of insulators designed for direct current. And a study of the environmental impact of the sixth line continued, using the high-voltage direct-current system simulator to pinpoint problems which may affect strategies for protecting the line.

Measurements on site and on IREQ's experimental line were used to evaluate the level of ambient audible noise on the Des Cantons-Comerford line, as well as the intensity of the electric field and natural ionic current. These measurements will give a clearer picture of the actual impact the line will have on the environment once it is commissioned.

Several new techniques were adopted during the year. For example, 30 signaling devices were installed on the system's high-voltage disconnect switches for medium-term study. This technique uses infrared beams to indicate the exact position of the switch contacts. Hydro-Québec also developed a portable dosimeter for research on the biological effects of electromagnetic fields. And a 735-kilovolt circuit breaker surveillance system was installed at Boucherville substation for a trial period.

Research for industry

During the year, Hydro-Québec continued collaboration with industry in diversification, research, and the development of technologies. It reached an agreement with Bell Canada covering research and development in fields of common interest related to the design, management and utilization of their respective systems. As a result, Bell Canada has already opened a research and testing centre at the IREQ site in Varennes. This centre will facilitate coordination of research projects and the exchange of findings.

Pilot projects were also carried out with Cascades Inc., Domtar Inc. and the Société Armstrong, all manufacturers of building materials. Centred mainly on infrared drying of porous materials, these projects will probably lead to the design and installation of high-power furnaces. Hydro-Québec continued to develop, in collaboration with Cegelec Industrie Inc., circuit breakers for low-temperature applications, and began testing the initial prototypes of a failsafe distribution surge arrester developed in collaboration with Joslyn Canada Inc.

In 1986, construction began on the liquid hydrogen plant of HydrogenAL Inc., in which Hydro-Québec is a shareholder; production will reach 10 tonnes of liquid hydrogen per day. Hydro-Québec also embarked upon technical collaboration with the paper industry. It developed a 20-kilowatt alternating-current supply at a frequency of 20 kilohertz for induction heating in the drying of paper. In collaboration with Les Constructions Désourdy Inc., it carried out preliminary studies on recycling bituminous concretes and drying and heating aggregates used to manufacture bitumens.

In response to the needs of companies in the pulp and paper, mining, metallurgy, textile, agribusiness and chemical sectors, Hydro-Québec is building an electrochemical-technologies and electrotechnologies laboratory (LTEE) in Shawinigan. Scheduled to open in early 1987, the laboratory will be used to test designs and develop processes and techniques using electricity.

Technologies of tomorrow

For Hydro-Québec, whose activities centre on high technology, laboratory work is very important. In 1986, ongoing research on several advanced technologies reached its critical phase. The Varennes tokamak, an experimental fusion device based on the principle of magnetic confinement, is in the final phase of construction. The vacuum chamber, in which plasmas will be formed and confined using intense electrical fields, was installed in its permanent position in the heart of the machine.

Great advances were made in the field of robotics, particularly with development, in collaboration with Ontario Hydro, of the first prototype of a compact robotized system for on-site repair of turbines damaged by cavitation. Work also continued on robotizing maintenance tasks on the

NEW PHILOSOPHY, NEW ORGANIZATION

In 1986, Hydro-Québec regrouped the research and development activities within the technology and international affairs unit to promote innovation and collaboration in technological development throughout the utility. The new unit will be called upon to act as a catalyst and coordinating agent company-wide in the areas of research, development, demonstration and marketing of technological products and processes.

The new philosophy centres on participation by all employees within a flexible framework which emphasizes the diversity and complementary nature of roles, encourages exchanges of expertise within the utility and with external partners, brings researchers and decision-makers closer together, and ensures that priorities are more clearly defined and financial resources better allocated.

distribution system: this year, laboratory tests focused on the installation and removal of the tie wires of a ceramic insulator on a distribution line.

The remarkable magnetic, mechanical and chemical properties of amorphous metals have attracted considerable attention for use in distribution transformers. Two prototypes of 75-kilovoltampere and 100-kilovoltampere units confirmed the advantages of the concept developed by Hydro-Québec. The utility also pursued work intended to optimize IRECA steel, which is ultra-resistant to erosive cavitation. Developed by Hydro-Québec researchers, this new stainless steel of low cobalt content will be used to repair hydraulic turbines.

Hydro-Québec also completed preliminary work on the development of polymer electrolyte batteries and carried out studies on battery configurations for specific markets.

Getting research to market

Hydro-Québec's technological leadership has resulted in products and processes that are now being manufactured and marketed either by companies created by the utility, or under contract with industrial partners.

In May 1986, Nouveler Inc., the Hydro-Québec subsidiary that promotes diversification by assisting the start-up of firms specializing in energy related fields, became an equal partner with Vibro-Meter Suisse in Vibro-Meter Inc., a new company that will manufacture and market, under licence from Hydro-Québec, an innovative air-gap measurement system developed by IREQ. Applications for this product in other areas are promising, especially in aeronautics and industrial equipment. Another subsidiary of Nouveler Inc., Cyme International Inc., successfully completed its first year of operation. The company, under licence from Hydro-Québec, markets power system analysis software adapted to personal computers and distributes the product in 30 countries under an agreement with Hydro-Québec International. And Geneq Inc. of Montréal, under licence from Hydro-Québec, is to manufacture a freezing-rain detector which will be used primarily in the monitoring of high-voltage lines.

CHALLENGES ON THREE CONTINENTS

With projects in more than 20 countries, 25 offers of service in 1986 alone and the signing of seven new contracts, Hydro-Québec and its subsidiary Hydro-Québec International are extensively involved with firms and agencies abroad.

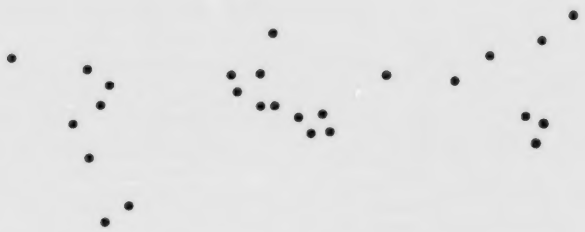
Promising breakthrough in Asia

In 1986, Hydro-Québec intensified its presence in Asia, until recently a relatively unexplored market. A Canadian consortium that includes Hydro-Québec International obtained a contract for a technical and economic study of the Three Gorges complex on the Yangtze River in China. Worth more than $8 million, the study should be completed by late 1987 (see box). If the complex is built, it will be the largest hydroelectric facility in the world, with an installed capacity of 14,800 megawatts. A feasibility study for construction of the Gehe Yan hydroelectric complex (4,900 megawatts) was carried out under a Sino-Canadian agreement involving Hydro-Québec International and Canadian partners.

In November 1986, a system control centre financed by the Canadian International Development Agency (CIDA) and built under the technical supervision of Hydro-Québec was inaugurated in Bangladesh. Hydro-Québec also signed and executed a contract for a rates study for the Sarawak Electricity Supply Corporation (SESCO) in Malaysia, a first contract for the utility in that part of the world. During the year, Hydro-Québec also undertook systems planning and operations studies on behalf of the Asian Development Bank.

SOCIAL AND HUMAN ENVIRONMENT STUDIES: AN INNOVATION

The feasibility study in which Hydro-Québec International is participating in China is innovative in that it includes an assessment of impact on the social and human environment with the resettlement of several hundred thousand people. It will be necessary to determine which socio-economic factors should be taken into consideration and what, for example, the normal level of the Yangtze River will be after the dam is built.



Expanding activities in Africa

For Hydro-Québec, Africa represents a vast market for the export of technical services and equipment related to the generation, transmission and use of electricity. Hydro-Québec International collaborated with IREQ, the architecture unit and external Québec partners in a study on installation of a control and testing centre for the Société Nationale de l'Electricité et du Gaz d'Algérie (SONELGAZ). The Canadian Export Development Corporation provided financial assistance for the project, worth more than $3 million.

Hydro-Québec continued to provide technical assistance in Africa: in Guinea, for technical training and management; in Cameroon, for carrying out studies on the Nachtigal dam; in Mali for the building of a 150-kilovolt line between Bamako and Ségou, and for the interconnected electrical system of the Organisation pour la mise en valeur du fleuve Sénégal (OMVS) which encompasses three countries, Senegal, Mali and Mauritania. In Zaire, optimization studies were carried out on the Inga-Shaba generation and transmission system of the Société Nationale d'Electricité, to ensure better operation of this vast network of generating stations with an installed capacity of over 2,000 megawatts.

Technical projects pursued in Latin America and the United States

Hydro-Québec continued to provide technical assistance in Latin America. In Peru, IREQ undertook studies on installation of an experimental high-altitude transmission line and line harmonics. In Argentina, it analyzed conductor vibrations on 500-kilovolt lines. It also provided technical assistance for installation of a simulated test circuit at the Instituto de Investigaciones Eléctricas in Mexico.

In the United States, Hydro-Québec carried out work on extruded cables on behalf of the Electrical Power Research Institute (EPRI), and completed tests for S&C Electric, A.B. Chance, Westinghouse, Northeast Utilities, Kearney, and other manufacturers.

COOPERATION IN AFRICA: TRAINING SESSIONS AND TWINNINGS

Hydro-Québec's cooperation activities abroad often entail training sessions and twinning, in both technical and management fields. In 1986, Guinea's Société Nationale d'Electricité and Hydro-Québec's La Grande Rivière region were paired for the first time in a technical support and management-assistance program. And a twinning agreement was reached between Senegal's Société Nationale d'Electricité and Hydro-Québec's Montmorency region. Hydro-Québec was also active in the field of training assistance: it welcomed more than 30 trainees from Guinea, Cameroon, and the People's Republic of the Congo. The training sessions, lasting from six to eight months, focused on project development and the operation of power lines and substations.

NEGOTIATIONS AND RATIONALIZATION

In 1986 fruitful negotiations resulted in the signing of seven of eight collective agreements up for renewal. Personnel reassignment, which had commenced in 1982, continued throughout the year. This rationalization paves the way for the objectives of the 1990s.

Intensive labor relations

In 1986, Hydro-Québec signed seven collective agreements with the Canadian Union of Public Employees and the Fraternité des constables speciaux d'Hydro-Québec, representing 14,309 permanent and temporary employees. All these agreements expire at the end of 1988. Negotiations centred primarily on differences between the total remuneration of Hydro-Québec employees and that in the comparison market.

One major offshoot of these negotiations was the establishment or revival of many joint committees, a clear reflection of both parties' willingness to carry on discussions and of their greater consensus in the search for appropriate solutions. Examples of this were the committees responsible for examining the scheduling of work time, technological change, contract work, life insurance protection and the system for evaluating trades employees.

During the year, Hydro-Québec recognized the Association des cadres de premier niveau and entered into promising discussions with members of the association, which represents 680 foremen and section heads.

Negotiation continued on renewal of the collective agreement with the Syndicat professionnel des ingénieurs d'Hydro-Québec, with discussion centred on salary and wage discrepancies and adjustment of the salary scale in line with corporate policies.

NUMBER OF PERMANENT AND TEMPORARY EMPLOYEES (1982-1986)

Number of employees

Between December 31, 1985 and December 31, 1986, the number of permanent and temporary employees declined from 20,996 to 20,796, with a drop in the number of temporary employees, from an average of 2,788 to 2,326, and a stabilization of the number of permanent employees.

Remuneration: salary lead reduced; pension plan improved

Gross salaries in 1986 totaled $872 million, of which $4.1 million went to senior executives. Collective agreements signed during the year will help reduce the salary lead of Hydro-Québec employees over those in the comparison market during the coming years. Important changes were made in the pension plan: in particular, an improvement in the indexing formula and the possibility of taking early retirement without penalty based on years of contribution and age. With regard to pension plan costs, a new formula enables Hydro-Québec and its employees to share the actuarial deficits arising from new improvements. Previously, the employer assumed all deficits.

Health and safety: accent on prevention

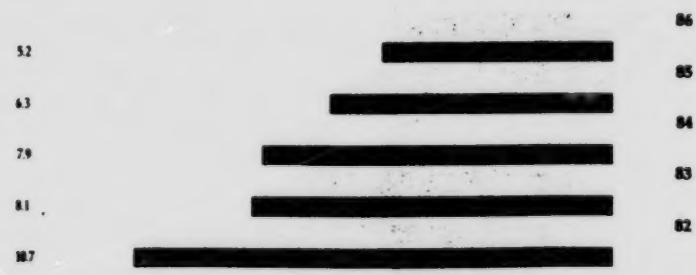
Prevention was the keynote throughout 1986. Hydro-Québec has begun to introduce into its regions the International Safety Evaluation System, commonly known as the "five-star" system. By the end of 1986, 38 of the 47 sectors had been evaluated using this method whereby specialized staff verify 20 key elements in the management of safety according to 579 standards of excellence.

TOTAL REMUNERATION LEAD OVER THAT OF THE COMPARISON MARKET (1982 and 1985)

Employment group	% lead in 1982	% lead in 1985
Office	23.9	20.5
Trades	18.8	8.3
Technicians	28.1	19.7
Engineers	17.8	23.9
Specialists	25.9	19.3
Managers	16.1	9.5

ANNUAL PAYMENT TO THE COMMISSION DE LA SANTÉ ET DE LA SÉCURITÉ DU TRAVAIL DU QUÉBEC (1982-1986)

(Millions of dollars)



Two new areas of research were added to the studies on work-related diseases: study of ergonomic constraints linked to the tasks of linemen and an epidemiological study of the effects of electromagnetic fields on human health.

In 1986, there were 32.73 work accidents and 762 days lost per million hours worked. Payment of $5.2 million in 1986 contributions to the Commission de la santé et de la sécurité du travail du Québec was the lowest in 10 years.

Action on equal opportunities

In 1984, Hydro-Québec announced its equal opportunities policy; in 1985, it endeavored to increase employee awareness of the policy, and in 1986 it moved towards achievement of specific quantitative objectives. The proportion of women in the various job groups increased.

A larger number of scholarships were granted to women. And the number of management internships for women increased, as did the number of positions reserved for women in jobs traditionally held by men.

Under the program to encourage the advancement of women employees, 10 positions of executive assistant at various levels were created for the duration of the internships, some of which began in 1985, while others will continue into 1987. Two of the participants have already obtained permanent senior management positions as a result of these training periods.

INCREASING AWARENESS OF WOMEN IN THE WORKPLACE

Two programs launched in 1985 continued successfully in 1986: "Rôles et comportements dans l'organisation" sessions, in which a total of 850 women met to discuss their aspirations and interests; and the highly-acclaimed theatre performance of "Le salaire brille pour tout le monde", which was seen by more than 9,000 employees.

WOMEN AS PERCENTAGE OF TOTAL EMPLOYEES, BY EMPLOYMENT GROUP (1985 and 1986)

Employment group	December 1985	December 1986
Managers		
Supervisory	3.1%	3.4%
Intermediate	4.7%	5.5%
Executive	2.5%	4.6%
Specialists	18.4%	18.6%
Engineers	3.9%	4.0%

FAR-REACHING RESPONSIBILITIES

Hydro-Québec's expansion has always gone hand-in-hand with that of Québec. Its contribution to economic development has included the abundant supply of low-cost electricity, the sustaining of thousands of jobs each year and the purchase of Québec goods and services worth millions of dollars. If it is to continue developing Québec's natural resources, Hydro-Québec must accept its social responsibilities, which go far beyond its traditional roles as a supplier of electricity and a driving force in the economy. In 1986 therefore Hydro-Québec continued to collaborate with municipalities affected by its projects and with all users of Québec resources, particularly industries, farmers and native peoples.

Economic spinoff

With the growth and diversification of Hydro-Québec's investment program, more than $1.5 billion was channeled into the Québec economy in 1986. Activities during the year generated about 58,000 person-years of work.

In addition to the traditional contributions of project management and job creation, Hydro-Québec continues to act as a pivotal force in economic development. Its new strategies of supply are aimed at ensuring the presence of Québec industry in manufacturing sectors hitherto absent from the Québec economy. Manufacturing agreements signed with Québec firms manufacturing circuit breakers, fuses and surge arresters illustrate Hydro-Québec's impact in 1986. These agreements created jobs and will promote technological progress in Québec through research and development.

Technical and financial assistance provided to diversify the uses of electricity in industry was also of economic benefit in 1986, especially in the pulp and paper sector. The location in Québec of new large-power industries will represent 10,000 person-years of work a year over the next three years.

JOBS RELATED TO HYDRO-QUÉBEC'S ACTIVITIES (1982-1986)

	(Person-Years)		
	1982	**1984**	**1986** *Estimate*
Generation, transmission and distribution of electricity			
Jobs related to operations			
Direct	16,790	15,185	15,140
Indirect	4,760	5,140	4,740
	21,550	20,325	19,880
Jobs related to investment			
Direct	14,800	9,170	8,875
Indirect	12,420	9,160	8,175
	27,220	18,330	17,050
	48,770	38,655	36,930
Electricity marketing			
Jobs related to marketing programs			
Dual-energy heating	—	980	1,285
Electrotechnologies	—	—	570
Rate discounts	—	13,140	7,820
Other	420	2,055	345
	420	16,175	10,020
Jobs related to rate advantages for large-power industrial customers	—	7,415	11,210
	420	23,590	21,230
Total	**49,190**	**62,245**	**58,160**

THE INDUSTRIAL DEVELOPMENT TEAM: ONE FULL YEAR OF OPERATION

Since June 1985, a small group of Hydro-Québec specialists has been responsible for promoting Québec's electricity among large-power users not presently located in Québec.

In 1986, the team developed its industrial-development strategy, based on a targeted, individualized approach to foreign industries manufacturing a specific product. This strategy was applied, for example, in West Germany in the chemicals industry, where investment studies were carried out on a number of products in the steel alloy sector.

The results of these initial undertakings are encouraging. The team piloted 10 investment studies, several of which should lead to the location in Québec of new industries over the next few years.

The Aluminerie de Bécancour Incorporée (ABI) and the Norsk Hydro magnesium plant were both established in 1986 partly as a result of successful energy marketing by Hydro-Québec. A total of about 1,200 jobs will be created by these plants.

Success was also achieved in the marketing of electric technologies. The use of Hydro-Québec patents generated sales of more than $7 million in 1986. Small businesses specializing in high technology received financial and technical assistance to develop exportable know-how. Two such businesses were Cyme International Inc. and Vibro-Meter Inc.

In addition, Hydro-Québec assisted several companies (including Venmar Inc. and Éconoler Inc.) in energy-related fields, such as energy savings and the manufacture of heating equipment.

Concern for collective well-being: signing of three agreements with the Cree

To fulfil certain commitments set forth in the James Bay and Northern Québec Agreement (JBNQA) signed in 1975, Hydro-Québec concluded three agreements with the James Bay Cree communities: Supplementary Agreement No. 7 amends the JBNQA; the La Grande Agreement (1986) sets out measures for further development of the La Grande complex, while guaranteeing the social stability and economic prosperity of the Cree; and the Mercury Agreement (1986) creates a program to protect local residents against the health effects of mercury. Mercury is found in the food of the Cree, especially in freshwater fish from lakes and reservoirs in the La Grande complex and James Bay territory.

These agreements call for funding for economic and community development of the Cree, the carrying out of mitigation measures, and the implementation of a mercury study program. They also provide for the creation of the James Bay Eeyou Corporation, under Cree management.

Additional measures designed to develop the quality of life in Cree communities include the setting-up of a local electrification program, a preferential system for the awarding of contracts to Cree organizations, and a training program to enable the hiring of Cree personnel to fill 150 positions in the La Grande region by 1996.

Preservation of farmland: a joint effort

In June 1986, following two years of negotiations, Hydro-Québec signed an important agreement with the Union des producteurs agricoles du Québec (UPA), in which both parties define the framework for Hydro-Québec's intervention in farm and woodland, for better reconciliation of farmers' concerns and Hydro-Québec's objectives. A joint permanent group will enable both parties to maintain ongoing dialogue.

Environmental protection: research and applications

In addition to dialogue with groups such as UPA, Hydro-Québec pursued other main objectives of its environment policy. Basic research is still at the centre of its activity. Growing concern among the public and scientists about the biological effects of electrical and magnetic fields has led Hydro-Québec to pursue its efforts to collect detailed data on the characteristics of these effects and their incidence among human beings and animals.

Thirty environmental-impact studies were completed, including environmental follow-up at Rivière des Prairies generating station, along the direct-current interconnection with New England and for the James Bay ecological surveillance system. Hydro-Québec also commissioned urban environment studies related to redevelopment of its downtown Montréal head-office building (see box).

Under a 1985 environmental enhancement program, six municipalities that will be affected by three Hydro-Québec construction projects proposed measures that will be financed by the utility.

HYDRO-QUÉBEC AND THE URBAN ENVIRONMENT

In 1986, Hydro-Québec commissioned an environmental assessment of its proposed head-office redevelopment. Environmental assessment, a new trend in urban development, entails examination of a project in relation to its milieu and the concerns of other interested parties. This is an innovative approach to commercial property development, as it encourages the integration of a project into its milieu and enhances the quality of life of users and of the community at large.

In addition, Hydro-Québec sponsors a series of conferences on the urban environment, in collaboration with the Université de Montréal. In 1986, the series focused on the rebirth of city centres.

FINANCIAL RESULTS

Hydro-Québec's financial results for 1986 again reflected the trends that first emerged in 1983. The large increase in volume of sales evidenced the performance of the Québec economy, which was good despite a slightly lower increase in real gross domestic product than in the previous three years. Hydro-Québec's net income for the year was $303 million, against $209 million in 1985.

As in 1985, lower international crude-oil prices increased downward pressures on electricity prices on markets where competition with other forms of energy is greatest. Average unit revenue from total electricity sales declined for the third consecutive year, despite the 5.4% average rate increase introduced in May 1986 for firm electricity sold in Québec.

Although the value of the Canadian dollar stabilized in relation to the United States dollar, it followed that currency's decline against other major currencies. This had the effect of increasing Hydro-Québec's interest costs and provision for exchange loss on borrowings in other currencies.

However, lower interest rates in 1986 enabled the utility to obtain new capital at better conditions and to reduce the cost of several existing borrowings.

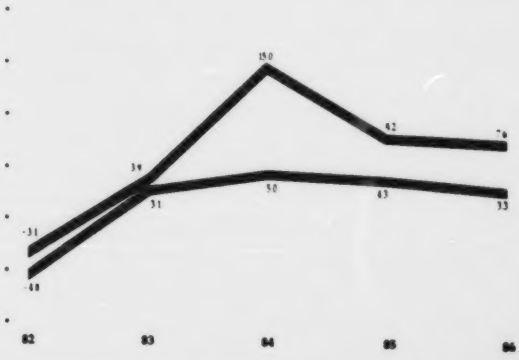
In 1986, Hydro-Québec decided to use its revenue from sales of electricity to the United States as a hedge against exchange risk on its long-term debt in U.S. dollars. It also adopted new accounting standards for its pension plan costs. These measures had a favorable impact on the year's results.

Sales volume exceeds forecast

Volume of total sales increased 7.6% in 1986, compared with 8.2% in 1985. Revenue from these sales rose 5.7% to $4,673 million. The growth in 1986, as in 1985, was attributable to continued expansion of the Québec economy, which showed an estimated 3.3% rise in real gross domestic product, and to the success of Hydro-Québec's marketing programs. The rate increase introduced in May also contributed to raising revenues.

The volume of sales, in all major sectors, was greater than forecast in Hydro-Québec's Development Plan 1986-1988, Horizon 1995. But as

COMPARATIVE CHANGES IN QUÉBEC'S REAL GROSS DOMESTIC PRODUCT AND HYDRO-QUÉBEC'S TOTAL SALES (1982-1986)
(Percentage)



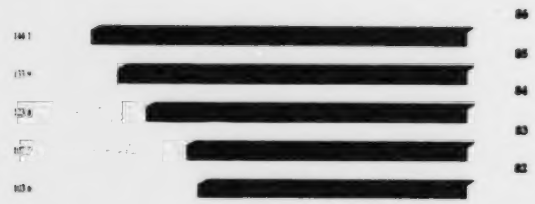
regards revenue, only revenue from sales of firm electricity in Québec, which rose 8.9% over 1985 to $3,857 million, clearly exceeded forecasts. Average unit revenue from surplus energy sold in Québec fell throughout the year — by about 30% — while the volume of these sales was slightly higher than forecast. Revenue from these sales totaled $167 million, down 20% from 1985.

Average unit revenue from export sales of electricity also declined, and the volume of these sales only slightly exceeded forecasts. Consequently, revenue from exports was down by about 4% from 1985, totaling $649 million.

Expenditure growth reduced by lower pension expense

Total expenditure rose by only 1.7% in 1986. Operations, its main component, which includes salaries, employee benefits, purchased services, etc., actually declined by 2.9%. Total expenditure would have risen by 5.5% and operating expenses by 3.5% had pension expense not declined as a result of changes in accounting standards for pension plan costs. Pension expense is now calculated on the basis of the real cost of employees' services during the period taken into consideration, rather than on the basis of funding contributions. Application of this new method in 1986 resulted in pension expense being $75 million less than it would have been under the former method.

TOTAL ELECTRICITY SALES (1982-1986)
(Billions of kilowatthours)



GROSS REVENUE (1982-1986)
(Millions of dollars)

A reduction in the average number of permanent staff under a 1985 voluntary retirement program, and fewer temporary personnel compared with 1985, held payroll expenses stable. Continued cost-cutting measures were also successful.

Hydro-Québec's operating expenses also include write-offs for preliminary studies on projects that are cancelled or indefinitely postponed. In 1986, the utility completed a three-year amortization of the cost of studies for the Nottaway-Broadback-Rupert and La Romaine projects, at the rate of $79 million per year. In addition, it began amortizing, also over three years, the cost of studies for the Delaney project, which represents slightly more than $14 million for the year.

Electricity purchases, which totaled $118 million, were down slightly from 1985. Taxes, however, rose more than 10% to $272 million due to the increase in capital and real estate related taxes.

Depreciation of fixed assets, at $464 million, was up nearly 11% as a result of the commissioning of nearly $2 billion of new equipment, including the final generating units at La Grande 4 and various components of the interconnection with New England.

Slower growth in interest expenditure

Interest charged to operations totaled $2,259 million in 1986, up 8.9% from 1985. The increase is considerably lower than that of the preceding five years (31.0% on average, compounded). Stabilization of gross interest expenditure despite an increased volume of debt is due to the lowering of interest rates, which decreased the cost of floating-rate debt. The lower interest rates also permitted renegotiation of several borrowings at lower cost and decreased the cost of the year's new borrowings.

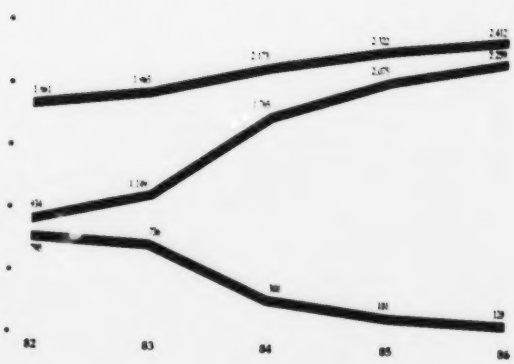
However, the positive effect of these factors on interest charged to operations was diminished by higher interest costs on debt denominated in European and Japanese currencies, because of these currencies' appreciation, and by a decline of 29.3% in interest charged to Construction in progress, which fell to $128 million.

Exchange loss declines

Exchange loss was 26.7% lower in 1986, totaling $189 million. It would have been $354 million had the utility

MAIN INTEREST COMPONENTS
(1982-1986)
(Millions of dollars)

- Gross interest charges
- Interest charged to operations
- Interest charged to Construction in progress



not decided, as of 1986, to designate its sales of electricity to the United States as a hedge against the exchange risk on its long-term debt in U.S. dollars. With no existing hedge for its debt in other foreign currencies, Hydro-Québec must amortize exchange loss on such debt until its maturity. Exchange loss on this debt increased in 1986 because of the appreciation of the currencies concerned against the Canadian dollar. However, renegotiation of several borrowings in foreign currencies had the effect of postponing related exchange losses to future financial years.

EVOLUTION OF EXPENDITURES (1982-1986)

(Millions of dollars)

	1985	Change 1985/1984	1986	Change 1986/1985	Average Annual Change 1982/1985
Operations (excluding write-offs)	1,073	4.5%	1,036	−3.4%	3.4%
Write-offs	90	13.9%	93	3.3%	—
Total Operations	**1,163**	**5.2%**	**1,129**	**−2.9%**	**6.1%**
Electricity purchased	122	−22.8%	118	−3.3%	−1.3%
Depreciation of fixed assets	419	11.4%	464	10.7%	18.0%
Taxes	246	9.8%	272	10.6%	10.0%
Total Expenditures	**1,950**	**4.6%**	**1,983**	**1.7%**	**8.1%**
Consumer Price Index (Canada)		4.0%		4.1%	4.7%

External financing: first perpetual borrowing

Net issue of long-term debt dropped $693 million from 1985 to $1,259 million. But that figure is not indicative of all external financing activities. For example, as renegotiation of existing borrowings for an amount of $1,092 million has no effect on the Consolidated Statement of Changes in Financial Position, those transactions are not included in it.

Hydro-Québec floated the first perpetual borrowing of its history in 1986. Contracted for on the Eurodollar market at a floating rate of interest, these perpetual notes for an amount of $550 million will help improve the utility's financial structure.

Hydro-Québec's other financial objectives were also attained. The proportion of the long-term debt denominated in Canadian dollars continued to increase to reach 50.8%, if SWAP agreements are taken into account. These agreements, although not shown in the financial statements, covered more than $1,500 million. The average term of new borrowings was extended to nearly 19 years through new long-term borrowings, including two contracted for 40 years in the United States and one for 30 years on the Euro-deutsche mark market.

In accordance with the La Grande Agreement (1986), net issue of long-term debt includes $95 million in long-term negotiable securities in partial settlement of total compensation of $112 million to the Cree.

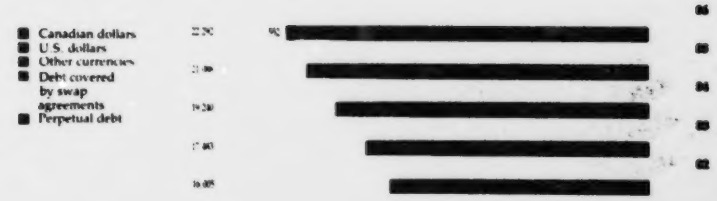
Debt and assets

At the end of 1986, Hydro-Québec's debt, including perpetual notes, totaled $22.3 billion, slightly more than $1.2 billion over 1985. Debt has almost tripled since 1977, when it was $7.5 billion.

Hydro-Québec's debt compares with assets of $30.6 billion, of which $24.4 billion is net property and plant in service and $1.9 billion is construction in progress.

Shareholders's equity reached slightly more than $7 billion at the end of 1986.

BREAKDOWN OF TOTAL DEBT (1982-1986)
(Millions of dollars)



Investment

Gross investment totaled $1,537 million, a decrease of $78 million from 1985. Most of this investment went into transmission and distribution facilities: $357 million and $519 million respectively. Investment in generating facilities accounted for $372 million, and included $96 million under the terms of the La Grande Agreement, the remaining $16 million of which was charged to transmission facilities.

Financial ratios

Interest coverage was 1.15 in 1986, thus attaining the objective of at least 1.00. Funds provided by operations again exceeded one billion dollars for the year. And the level of self-financing reached 41.0% of the year's gross investment and debenture redemptions, widely surpassing the minimum objective of 30%.

FINANCIAL RATIOS AND DECLARED DIVIDENDS (1982-1986)

	1982	1983	1984	1985	1986
Interest coverage	1.01	1.04	1.10	1.12	1.15
Self-financing (%)	35.1	40.3	34.2	35.7	41.0
Capitalization (%)	26.0	26.6	25.3	24.1	24.0
Declared dividends *(Millions of dollars)*	7	60	156	—	—

Interest Coverage
(before dividends)

$$\frac{\textit{Income before interest and exchange loss} + \textit{Net investment income}}{\textit{Gross interest charges}}$$

Self-financing

$$\frac{\textit{Total financial resources provided by operations} - \textit{Declared dividends}}{\textit{Investments} + \textit{Redemption of long-term debt}}$$

Capitalization

$$\frac{\textit{Shareholder's equity}}{\textit{Shareholder's equity} + \textit{Long-term debt} + \textit{Perpetual debt} + \textit{Notes payable} + \textit{Long-term debt payable within one year}}$$

However, the capitalization ratio fell slightly below the 25% objective, to stand at 24.0%. The Hydro-Québec Act does not permit the utility to pay a dividend to the Gouvernement du Québec when the capitalization ratio falls below the 25% objective. Therefore no dividend was paid in 1986 as was the case also in 1985.

Financial situation of retirement fund

Net assets of the Hydro-Québec Retirement Fund rose from $1,893 million to $2,165 million in 1986, an increase of $272 million. And the market value of the investment portfolio increased by $307 million to $2,330 million. Return on investments was in excess of 13%, because the year's lower interest rates considerably appreciated the value of bond and debenture holdings. Investment policy was broadened to allow for continued diversification, especially on mortgage and U.S. stock markets.

As a result of the 1985 voluntary departure program, the fund's pension payments continued their rapid increase, totaling $71 million in 1986, up 16.4% over 1985. At year end, there were 5,327 beneficiaries, compared with 4,622 at the end of 1985. An actuarial valuation of the fund as of December 31, 1985, showed the Hydro-Québec Retirement Fund remained in sound financial condition, with a net actuarial surplus of $37 million.

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MANAGEMENT REPORT

Hydro-Québec's consolidated financial statements were prepared by management in accordance with generally accepted accounting principles and approved by the Board of Directors. In the opinion of management, they were properly prepared, within reasonable limits of materiality, so as to incorporate all important elements and data available at January 30, 1987. The financial results contained in the Annual Report are based on the financial statements.

Guy Coulombe
President and Chief Executive Officer

AUDITORS' REPORT

To the Gouvernement du Québec,

We have examined the consolidated balance sheet of Hydro-Québec as at December 31, 1986 and the consolidated statements of operations, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of Hydro-Québec as at December 31, 1986 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied, except for the change in the method of accounting for pension plan costs, as explained in Note 2, to the financial statements, on a basis consistent with that of the preceding year.

Charette, Fortier, Hawey
Touche Ross
Chartered Accountants

Samson Bélair
Chartered Accountants

Montréal, Canada
January 30, 1987

CONSOLIDATED STATEMENT OF OPERATIONS

		(in millions of dollars) For the year ended December 31	
		1986	1985
Revenue			
	Sales of electricity (Note 3)	**$4,673**	$4,423
	Other operating income	**61**	69
		4,734	4,492
Expenditure			
	Operations (Note 2)	**1,129**	1,163
	Electricity purchased	**118**	122
	Depreciation of fixed assets	**464**	419
	Taxes (Note 4)	**272**	246
		1,983	1,950
Income before interest and exchange loss		**2,751**	2,542
	Interest (Note 5)	**2,259**	2,075
	Exchange loss (Note 6)	**189**	258
		2,448	2,333
Net income		**$ 303**	$ 209

CONSOLIDATED BALANCE SHEET

(in millions of dollars)
As at December 31

Assets		**1986**	1985
Fixed assets			
	Property and plant (Note 7)		
	In service	**$27,957**	$26,040
	Accumulated depreciation	**3,509**	3,092
		24,448	22,948
	Construction in progress	**1,948**	2,469
		26,396	25,417
Current assets			
	Cash and short-term investments	**74**	16
	Accounts receivable	**1,047**	941
	Materials, fuel and supplies	**214**	226
		1,335	1,183
Other assets			
	Investments (Note 8)	**127**	130
	Deferred expenses (Note 9)	**2,730**	2,453
		2,857	2,583
		$30,588	$29,183

On behalf of the Board,

A. Hervé Hébert

Guy Coulombe

Montréal, Canada
February 18, 1987

	(in millions of dollars) As at December 31	
Liabilities and shareholder's equity	**1986**	1985
Long-term debt (Note 10)	**$20,349**	$20,123
Current liabilities		
Accounts payable	**475**	555
Notes payable	**9**	68
Accrued interest	**789**	752
Long-term debt payable within one year (Note 10)	**1,391**	965
	2,664	2,340
Perpetual debt (Note 11)	**552**	—
Shareholder's equity		
Capital stock		
Authorized 50,000,000 shares, par value of $100 each		
Issued and fully paid 43,741,090 shares	**4,374**	4,374
Retained earnings	**2,649**	2,346
	7,023	6,720
	$30,588	$29,183

CONSOLIDATED STATEMENT OF RETAINED EARNINGS

(in millions of dollars)
For the year ended December 31

	1986	1985
Balance at beginning of year	$2,346	$2,137
Net income	303	209
Balance at end of year	$2,649	$2,346

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

(in millions of dollars)
For the year ended December 31

	1986	1985
Funds provided by operations		
Net income	$ 303	$ 209
Depreciation of fixed assets	464	419
Amortization of deferred expenses	364	397
Difference between pension expense and contributions	(75)	—
Net loss (net profit) on redemption of long-term debt	5	(10)
	1,061	1,015
Funds provided by external financing		
Net issue of long-term debt	1,259	1,952
Net issue of perpetual debt	550	—
Redemption of long-term debt	(1,050)	(1,228)
	759	724
Funds used for various purposes		
Change in working capital*	254	35
Other	29	89
	283	124
Funds available for investment	$1,537	$1,615
Investment		
Fixed assets	$1,470	$1,528
Grants under sales programs	67	87
	$1,537	$1,615

* *Excluding long-term debt payable within one year.*

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 December 31, 1986

Significant accounting policies

a) Consolidation

The consolidated financial statements include the financial statements of Hydro-Québec and its subsidiary companies.

b) Rates

Under the provision of its Act, Hydro-Québec has the mandate to supply power and to pursue endeavors in energy-related research and promotion, energy conversion and conservation, and any field connected with or related to power or energy. The rates and conditions under which power is supplied must be consistent with sound financial administration. The Hydro-Québec Act stipulates that the rates must be maintained at a level sufficient to defray at least all operating expenditures, interest on debt, and depreciation of fixed assets over a maximum period of 50 years. The rates are established by Hydro-Québec and are approved by the Gouvernement du Québec.

c) Sales of electricity

Revenue from sales of electricity is recorded on the basis of cyclical billings. It is also accrued in respect of electricity delivered but as yet unbilled.

d) Property and plant

Property and plant include generation, transmission and distribution facilities and administration and service buildings, as well as construction, operating and research equipment. They are carried at cost, which includes material, direct labor and engineering and administration overhead costs applicable to the construction program. The cost also includes interest charged to Construction in progress as explained under (f) hereinafter. The costs of additions, improvements and replacements are capitalized and expenditures for maintenance and repairs are charged to operations. At the time of retirement or sale of an asset, the cost and accumulated depreciation, less the amount realized, are transferred to a separate account; the net amount is amortized over ten years according to the sinking-fund method of depreciation, based on an interest rate of 3%.

The costs of generating facilities, up to an amount equal to the accumulated cost at date of transfer, are transferred to Property and plant in service by instalments proportionate to the number of generating units of the project that are completed and in service, on the basis of the present value of the total estimated cost. The costs of transmission, distribution and other facilities are transferred to Property and plant in service when these facilities are completed and in commercial operation.

Note 1 — Significant accounting policies (cont'd)

e) Depreciation

Hydro-Québec uses the sinking-fund method of providing for depreciation of its property and plant (other than construction, operating and research equipment), based on an interest rate of 3% and the following expected service lives:

Hydraulic powerhouses, dams, reservoirs, transmission towers (steel) and conductors, and administration and service buildings	50 years
Hydraulic turbines and generators and distribution conductors	40 years
Nuclear power station and its turbine, generator and reactor	30 years
Distribution poles	25 years

Construction, operating and research equipment is depreciated over its expected service life according to the straight-line method.

f) Interest charged to Construction in progress

Interest is added to the cost of construction in progress at a rate equivalent to the weighted average of the effective interest rates on Hydro-Québec's debt securities issued to finance such construction. This rate was 14.20% in 1986 and 13.60% in 1985, and includes foreign exchange fluctuations on interest payments made in foreign currencies and exchange loss on the capital of this debt.

g) Research and development

Preliminary engineering, investigation and survey costs incurred on projects before authorization for their construction is obtained are charged to operating expenditure. The cost of research and development related to alternative energy sources, or not related to a specific project, is also charged to operations.

h) Materials, fuel and supplies

Hydro-Québec values its inventories of materials, fuel and supplies on an average-cost basis.

i) Investments

All investments are shown at cost. The cost of short-term investments approximates market value.

Note 1 — Significant accounting policies (cont'd)

j) Deferred expenses

Grants under sales programs

In the framework of its plan to expand the Québec market, Hydro-Québec has implemented assistance programs for the marketing of electricity. The grants for these programs are amortized on a straight-line basis over the five years after the year in which they are made.

Debt-security discount and expenses

Debt-security discount and expenses are amortized on a straight-line basis over the life of the debt to which they apply.

Nottaway-Broadback-Rupert, La Romaine and Delaney projects

As the Nottaway-Broadback-Rupert, La Romaine and Delaney projects have been postponed for an indefinite period, the expenses incurred for these projects are amortized on a straight-line basis over three years.

Other

These deferred expenses include various expenditures for the benefit of future years and are amortized on a straight-line basis over periods not exceeding 40 years.

k) Foreign currency translation

Revenue and expenditure resulting from transactions made in foreign currencies are converted at the Canadian dollar equivalent at the rates of exchange at the date of transaction. Monetary assets and liabilities are translated into Canadian currency at the rates of exchange at the balance sheet date and non-monetary items are translated into the Canadian dollar equivalent at the rates of exchange at the date of transaction. However, monetary items covered by monetary agreements against exchange risks are converted into Canadian dollars at the rates of exchange established under the conditions of the relevant agreement.

The exchange gains or losses resulting from these conversions are included in the Consolidated Statement of Operations; those pertaining to long-term debt are deferred and amortized on a straight-line basis over the remaining life of the debt, except for those hedged by future revenue streams in United States dollars, which are deferred until the date of repayment of such debt.

l) Sinking-fund

Hydro-Québec forms virtually its entire sinking fund through the purchase of its own debentures. It deducts these funds from long-term debt and carries them at par, which may not be indicative of cost or current market value. The resulting profit, net of unamortized discount and other expenses, is included with Interest (see Note 5). Debentures of an issue purchased for the sinking fund of that issue are cancelled.

m) Retirement plan

The costs of the retirement plan are determined periodically by independent actuaries. Pension expense is charged annually to operations and comprises the total of the following:

Note 1 — Significant accounting policies (cont'd)

- the cost of pension benefits provided in exchange for employees' services rendered during the year, as calculated using the actuarial method pro rated on services, and
- amortization over the employees' expected average remaining service life, according to the level annual contribution method, of (i) adjustments arising from changes in the plan or in assumptions, (ii) experience gains or losses, and (iii) the plan surplus determined upon adoption of the 1986 recommendations of the Canadian Institute of Chartered Accountants.

The cumulative difference between pension expense and contributions made to the retirement fund is reflected in Deferred expenses.

Note 2

Change in an accounting policy

In 1986, Hydro-Québec adopted the recommendations of the Canadian Institute of Chartered Accountants regarding pension costs and obligations. These recommendations are designed to spread the cost of pension plans over the period services are rendered. Previously, pension expense mainly reflected contributions made to the retirement fund in a given year in order to finance the plan.

Adoption of these recommendations resulted in an increase of $75 million in net income compared with the method used in 1985, and inclusion in the balance sheet of a deferred pension expense of equivalent amount.

As these recommendations are being applied prospectively, no adjustment has been made to the financial statements for prior years.

Note 3

Sales of electricity

Sales of electricity include $378 million ($332 million in 1985) from sales to customers in the United States.

Note 4

Taxes

(in millions of dollars)	1986	1985
Capital tax	$137	$123
Tax on gross revenue as municipal real estate tax on certain immovables	112	103
Real estate taxes	23	20
	$272	$246

Note 5

Interest

(in millions of dollars)	1986	1985
Interest on long-term debt	$2,373	$2,298
Interest on perpetual debt	10	—
Interest on bank indebtedness and notes payable	5	1
Amortization of debt-security discount and expenses	24	23
Net loss (net profit) on redemption of long-term debt	5	(10)
	2,417	2,312
Less		
Interest charged to Construction in progress	128	181
Net investment income	30	56
	158	237
	$2,259	$2,075

Note 6

Exchange loss

Generally accepted accounting principles for conversion of long-term debt denominated in foreign currency prescribe that unrealized exchange gains or losses resulting from the difference between the rate of exchange of the Canadian dollar in effect at the date of issue and the rate in effect at the balance sheet date be amortized over the remaining life of the debt concerned. These principles also stipulate that no amortization is required if there is assurance of sufficient future revenue streams in the currency in which the debt must be repaid at maturity.

Future revenue streams in United States dollars from electricity sales constitute an effective hedge against exchange risk on the long-term debt denominated in United States dollars. Had this revenue not been so designated as of 1986, the exchange loss in 1986 would have been $354 million.

Note 7

Property and plant

(in millions of dollars)		1986			1985		
		Property and plant in service	Accumulated depreciation	Construction in progress	Property and plant in service	Accumulated depreciation	Construction in progress
Generation							
	Hydraulic	$13,492	$1,422	$1,129	$12,751	$1,258	$1,557
	Nuclear	1,453	95	10	1,447	65	10
	Other	351	124	9	328	110	24
		15,296	**1,641**	**1,148**	14,526	1,433	1,591
Transmission							
	Substations	2,875	309	231	2,520	268	358
	Lines	4,044	436	112	3,894	387	136
		6,919	**745**	**343**	6,414	655	494
Distribution							
	Substations	920	153	107	888	139	66
	Lines	3,080	449	240	2,696	406	204
		4,000	**602**	**347**	3,584	545	270
Other							
	Administration and service buildings	521	50	62	419	42	75
	Equipment	597	322	—	516	278	—
	Sundry	624	149	48	581	139	39
		1,742	**521**	**110**	1,516	459	114
Total		**$27,957**	**$3,509**	**$1,948**	$26,040	$3,092	$2,469

Note 8

Investments

(in millions of dollars)	1986	1985
Churchill Falls (Labrador) Corporation Limited (CFLCo) (see Note 14)		
General Mortgage Bonds, 7½%, due 1987 through 2010 (par value $88 million and $89 million, respectively)	$ 79	$ 80
Common shares	34	34
	113	114
Sundry investments	14	16
	$127	$130

The capital stock of CFLCo is held 65.8% by Newfoundland and Labrador Hydro-Electric Corporation (a Crown corporation of the Province of Newfoundland), and 34.2% by Hydro-Québec. Hydro-Québec's share of the earnings, dividends and retained earnings of CFLCo at December 31, 1986 is as follows:

	Earnings	Dividends	Retained earnings
Share of retained earnings at January 1, 1985			$70
1985	$11	$9	2
1986	9	8	1
Share of retained earnings at December 31, 1986			$73

Dividends are included in Net investment income (see Note 5).

Note 9

Deferred expenses

Deferred expenses comprise the unamortized balances of the following items:

(in millions of dollars)	1986	1985
Unrealized exchange loss	$2,116	$1,907
Grants under sales programs	223	207
Debt-security discount and expenses	188	171
Pension expense (Note 2)	75	—
Nottaway-Broadback-Rupert, La Romaine and Delaney projects	29	79
Other	99	89
	$2,730	$2,453

Note 10

Long-term debt

Hydro-Québec's long-term debt is guaranteed by the Province de Québec, except for an amount of $448 million ($257 million in 1985).

Debenture and other long-term debt maturities, and sinking-fund requirements, converted into Canadian dollars, are shown in the following table:

	1986		1985	
Years of maturity	(in millions of dollars)	Weighted average interest rate	(in millions of dollars)	Weighted average interest rate
1986	$ —		$ 965	
1987	1,391		1,559	
1988	1,036		935	
1989	1,187		1,309	
1990	1,324		1,516	
1991	2,007		—	
1 - 5 years	6,945	11.57%	6,284	10.50%
6 - 10 years	6,189	10.73%	6,545	11.90%
11 - 15 years	1,918	9.54%	2,162	10.45%
16 - 20 years	4,315	10.20%	4,088	10.41%
21 - 25 years	1,250	11.13%	1,354	10.66%
26 - 30 years	613	12.20%	655	12.88%
31 - 35 years	—	—	—	
36 - 40 years	510	8.56%	—	
	21,740		21,088	
Less				
Portion payable within one year	1,391		965	
	$20,349		$20,123	

Note 10 — Long-term debt (cont'd)

Repayments to be made in Canadian dollars and in foreign currencies, with their Canadian dollar equivalent, are shown in the following table:

	(in millions of units)			1986 Total (in millions of dollars)	1985 Total (in millions of dollars)
	1987 to 1991	*1992 to 2026*	*Total*	*1987 to 2026*	*1986 to 2015*
Canadian dollars	2,312	6,538	8,850	$ 8,850	$ 7,859
At rates established according to conditions of monetary agreement					
United States dollars	605	555	1,160	1,756	1,074
Deutsche marks	150	200	350	179	179
Swiss francs	100	250	350	195	195
Yen	—	10,000	10,000	69	—
				11,049	9,307
At rates in effect at balance sheet date					
United States dollars	1,799	4,272	6,071*	8,382	9,868
Deutsche marks	452	699	1,151	828	667
Swiss francs	488	290	778	667	531
Yen	13,668	18,332	32,000	279	224
Pounds sterling	—	150	150	308	303
ECUs	90	—	90	132	112
Guilders	60	90	150	95	76
				10,691	11,781
				$21,740	$21,088

* *An amount of U.S.$5,917 million is hedged by future revenue streams in United States dollars (see Note 6).*

Hydro-Québec has an undrawn revolving standby credit which expires in 1994 for U.S.$750 million. Any borrowing under this line of credit will bear interest at a rate based on the average London Interbank Offered Rate (LIBOR).

Note 11

Perpetual debt

Perpetual notes in the amount of U.S.$400 million are shown in Canadian dollars at the rate of exchange in effect at date of issue ($552 million at the rate of exchange at balance sheet date). These notes, bearing a variable rate of interest, are guaranteed by the Province de Québec and are redeemable, at Hydro-Québec's option, beginning in 1991.

Note 12

Restrictions on dividends

The dividends to be paid by Hydro-Québec are declared once a year by the Gouvernement du Québec, which also determines the terms and conditions of payment. For a given financial year, they cannot exceed the distributable surplus, which is established as follows: 75% of Income before interest and exchange loss and the year's Net investment income, less interest on long-term and perpetual debt, on bank indebtedness and on notes payable, and less amortization of debt-security discount and expenses. This calculation is made on the basis of the consolidated financial statements.

However, in respect of a given financial year no dividend may be declared in an amount that would have the effect of reducing the rate of capitalization to less than 25% at the end of the year concerned. This rate corresponds to the ratio between shareholder's equity (less dividends declared for the year) and long-term debt, plus notes payable, perpetual debt and shareholder's equity (less dividends declared for the year).

The government declares the dividends for a given year within 30 days after the transmission by Hydro-Québec to the government of the financial data relative to the distributable surplus. On expiry of the time prescribed, any distributable surplus or part thereof which has not been subject to a dividend declaration may no longer be distributed to the shareholder as a dividend.

Note 13

Retirement Plan

The Hydro-Québec Retirement Plan is a contributory, benefit-based, final-pay pension plan, under which benefits payable are guaranteed by Hydro-Québec. At December 31, 1986, 18,571 employees (18,941 in 1985) were contributing to the plan. An independent actuarial valuation was made in 1986 in order to determine the present value of the accrued pension benefits based on employees' expected basic salary until retirement. The assets of the retirement fund are valued at a market-related value.

At December 31, 1986, the date of the most recent valuation, the retirement plan shows a surplus as follows:

	(in millions of dollars)
Retirement fund assets	$2,315
Present value of accrued pension benefits	(1,931)
Excess special contributions made by Hydro-Québec	(59)
Surplus	$ 325

For the year ended December 31, 1986, pension expense amounted to $9 million. A difference of $75 million between contributions made to the retirement fund in 1986 and the pension expense for the period was transferred to Deferred expenses.

Note 14

Commitments, contingencies and projected capital expenditures

Churchill Falls

On May 12, 1969, Hydro-Québec executed a contract with Churchill Falls (Labrador) Corporation Limited (CFLCo) whereby Hydro-Québec undertook to purchase virtually all the power generated at the Churchill Falls generating station, of a rated capacity of 5,225,000 kilowatts, for a period of 40 years from September 1, 1976, except for an amount not to exceed 300,000 kilowatts of such power which may be recaptured by CFLCo. This contract will be automatically renewed for a further period of 25 years upon already agreed terms.

By this contract, Hydro-Québec undertook to make payment for energy whether or not taken, subject to certain limitations and compensations, and to pay CFLCo an amount equal to a portion of the interest charges on the debt incurred by CFLCo to finance the construction of the plant as well as an amount equal to a portion of the losses on foreign exchange incurred to service the debt issued in U.S. dollars. Hydro-Québec can also be required to make additional advances, against the issue of units of Subordinate Debentures and shares of Common Stock, to service the debt of CFLCo and to cover its expenses if funds are not otherwise available.

Two legal proceedings concerning the rights to the energy produced by the Churchill Falls power station are presently before the courts:

- In 1976, Hydro-Québec and CFLCo were served in an action brought by the Attorney General of Newfoundland to obtain delivery of 800,000 kilowatts of power generated from the Upper Churchill River.
- In 1977, Hydro-Québec began legal proceedings in Québec to obtain confirmation of its rights to the energy generated by the Churchill Falls power station.

The lower and appeal courts, both in Newfoundland and in Québec, allowed the conclusions sought by Hydro-Québec. However, in May 1986, the Supreme Court of Canada granted the Attorney General of Newfoundland leave to appeal the decision rendered by the Court of Appeal of Newfoundland, and CFLCo leave to appeal the decision handed down by the Québec Court of Appeal.

Projected capital expenditures

Hydro-Québec plans call for capital expenditures in the amount of $1,786 million for the year 1987.

SUMMARY OF CONSOLIDATED OPERATIONS 1982-1986

		(in millions of dollars)				
		1986	1985	1984	1983	1982
Revenue						
	Sales of electricity	**$4,673**	$4,423	**$4,101**	$3,593	$3,257
	Other operating income	**61**	69	72	66	56
		4,734	4,492	4,173	3,659	3,313
Expenditure						
	Operations	**1,129**	1,163	1,106	1,038	975
	Electricity purchased	**118**	122	158	117	127
	Depreciation of fixed assets	**464**	419	376	311	255
	Taxes	**272**	246	224	209	185
		1,983	1,950	1,864	1,675	1,542
Income before interest and exchange loss		**2,751**	2,542	2,309	1,984	1,771
Interest						
	Interest on long-term debt	**2,373**	2,298	2,149	1,938	1,807
	Interest on perpetual debt	**10**	—	—	—	—
	Interest on bank indebtedness and notes payable	**5**	1	2	8	37
	Amortization of debt-security discount and expenses	**24**	23	22	19	17
	Net loss (net profit) on redemption of long-term debt	**5**	(10)	(18)	(18)	(38)
	Interest charged to Construction in progress	**(128)**	(181)	(300)	(736)	(790)
	Net investment income	**(30)**	(56)	(70)	(62)	(99)
		2,259	2,075	1,785	1,149	934
Exchange loss		**189**	258	223	128	37
		2,448	2,333	2,008	1,277	971
Net income		**$ 303**	$ 209	**$ 301**	$ 707	$ 800

CONSOLIDATED SALES AND REVENUE 1982-1986

		1986	1985	1984	1983	1982	Average annual increase (in %) 1986/1981
Electricity sales *(in millions of kWh)*	Firm in Québec:						
	Residential and farm	40,548	38,427	36,041	32,510	32,133	5.2
	General	17,221	20,811	19,794	19,736	19,198	(2.2)
	Institutional	5,014	—	—	—	—	—
	Industrial	36,512	34,351	31,383	29,313	28,687	3.0
	Other	4,241	4,052	3,804	3,582	3,523	3.4
		103,536	97,641	91,022	85,141	83,541	3.8
	Surplus in Québec:						
	General	1,395	1,361	928	88	—	—
	Industrial	11,082	9,505	6,955	2,337	1,602	44.1
	Neighboring systems	1,176	1,239	2,028	565	555	6.3
		13,653	12,105	9,911	2,990	2,157	38.8
	Deliveries outside Québec:						
	Firm electricity	6,980	6,898	6,299	6,702	5,755	4.0
	Surplus electricity	19,954	17,295	16,583	12,835	12,125	9.4
		26,934	24,193	22,882	19,537	17,880	7.8
	Total sales	**144,123**	133,939	123,815	107,668	103,578	6.2
Revenue from electricity sales *(in millions of dollars)*	Firm in Québec:						
	Residential and farm	$1,683	$1,542	$1,422	$1,265	$1,164	11.6
	General	815	938	880	855	774	4.2
	Institutional	211	—	—	—	—	—
	Industrial	978	904	840	763	692	9.5
	Other	170	157	148	137	127	9.1
		3,857	3,541	3,290	3,020	2,757	10.3
	Surplus in Québec:						
	General	20	24	16	1	—	—
	Industrial	135	167	119	36	20	45.1
	Neighboring systems	12	18	30	8	5	8.5
		167	209	165	45	25	41.9
	Deliveries outside Québec:						
	Firm electricity	242	218	177	171	164	28.5
	Surplus electricity	407	455	469	357	311	5.9
		649	673	646	528	475	11.6
	Total revenue	**$4,673**	$4,423	$4,101	$3,593	$3,257	11.0
Number of customer accounts *(year-end)*	Residential and farm	2,599,403	2,527,643	2,445,755	2,369,163	2,286,194	3.1
	General	219,284	235,291	230,078	255,370	259,612	(3.1)
	Institutional	23,275	—	—	—	—	—
	Industrial	13,045	13,077	12,963	12,970	11,505	2.3
	Other	7,415	7,579	7,805	6,768	7,633	(2.3)
	Total	**2,862,422**	2,783,590	2,696,601	2,644,271	2,564,944	2.7

ENERGY REQUIREMENTS OF SYSTEM 1982-1986

	(in millions of kilowatthours)					Average annual increase (%) 1986/
	1986	1985	1984	1983	1982	1981
Total requirements						
Generated (gross)	128,078	115,538	100,343	88,321	78,821	9.7
Received:						
Purchased	30,892	32,111	36,333	31,680	36,398	(3.6)
Received as per agreement	1,940	2,368	2,210	2,484	2,241	(0.6)
	32,832	34,479	38,543	34,164	38,639	(3.4)
Total requirements	**160,910**	150,017	138,886	122,485	117,460	6.1
Québec requirements						
Firm sales in Québec	103,536	97,641	91,022	85,141	83,541	3.8
Deliveries in Québec as per agreement	3,118	3,470	3,230	3,501	3,613	0.3
Total – Priority consumption	**106,654**	101,111	94,252	88,642	87,154	3.7
Generating-station service	514	685	652	545	331	9.6
Losses and other	10,655	11,928	11,188	10,767	9,936	2.7
Total priority requirements	**117,823**	113,724	106,092	99,954	97,421	3.6
Surplus sales in Québec	13,653	12,105	9,911	2,990	2,157	38.8
Generating-station service	63*	—	—	—	—	—
Losses and other	773*	—	—	—	—	—
Total Québec requirements	**132,312**	125,829	116,003	102,944	99,578	5.5
Deliveries outside Québec						
Firm sales	6,980	6,898	6,299	6,702	5,755	4.0
Surplus sales	19,954	17,295	16,583	12,835	12,125	9.4
Deliveries as per agreement	29	(5)	1	4	2	42.1
Generating-station service	127*	—	—	—	—	—
Losses and other	1,508*	—	—	—	—	—
Total deliveries outside Québec	**28,598**	24,188	22,883	19,541	17,882	9.1
Total requirements	**160,910**	150,017	138,886	122,485	117,460	6.1

** As of January 1986, losses and generating-station service are assigned to various categories.*

POWER REQUIREMENTS OF SYSTEM FOR THE WINTER BEGINNING IN DECEMBER*

	(in thousands of kilowatts)					Average annual increase (%) 1986/
	1986	1985	1984	1983	1982	1981
Total requirements	**26,004**	25,745	25,487	21,961	20,189	5.1
Priority requirements	**23,219**	22,895	22,406	19,788	18,379	3.4

** The power requirements of 1985 and 1983 include respectively 881 MW and 487 MW which were withheld through application of interruptible power clauses in certain contracts.*

AUDITORS' REPORT

To the Administrators,

We have examined the statement of net assets of the Hydro-Québec Retirement Fund as at December 31, 1986 and the statement of changes in net assets for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the net assets of the Hydro-Québec Retirement Fund as at December 31, 1986, and the changes in its net assets for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Charette, Fortier, Hawey
Touche Ross

Charette, Fortier, Hawey
Touche Ross
Chartered Accountants

Samson Bélair

Samson Bélair
Chartered Accountants

Montréal, Canada
January 30, 1987

STATEMENT OF NET ASSETS

	(in millions of dollars) As at December 31 1986	1985
Investments (Note 2)		
Bonds or debentures		
of Hydro-Québec guaranteed by the Province de Québec	$ 517	$ 474
issued or guaranteed by the Province de Québec	247	241
issued or guaranteed by other provinces	52	47
of municipalities, school commissions, Cegeps, hospitals and universities	188	145
issued or guaranteed by the Government of Canada	198	288
of corporations	227	138
	1,429	1,333
Common stock	259	124
Deep-discount investments guaranteed by the provinces or by the Government of Canada	210	168
Other investments	5	8
Cash and short-term investments	276	280
	2,179	1,913
Accrued interest on investments	42	40
Accounts receivable	3	1
	2,224	1,954
Less		
Excess special contributions made by Hydro-Québec (Note 3)	59	61
	$2,165	$1,893

On behalf of Hydro-Québec,

A. Hervé Hébert

Guy Coulombe

Montréal, Canada
February 18, 1987

STATEMENT OF CHANGES IN NET ASSETS

		(in millions of dollars) For the year ended December 31	
		1986	1985
Balance at beginning of year		**$1,893**	$1,697
Increase			
	Current contributions		
	Employees	**34**	36
	Hydro-Québec	**68**	71
		102	107
	Hydro-Québec's contribution (Note 3)	**18**	19
	Revenue from investments	**238**	211
		358	337
		2,251	2,034
Decrease			
	Excess special contributions made by Hydro-Québec (Note 3)	**15**	80
	Benefits paid	**71**	61
		86	141
Balance at end of year		**$2,165**	$1,893

NOTES TO FINANCIAL STATEMENTS

Note 1 December 31, 1986

Accounting policies

a) These statements show only the net assets of the Hydro-Québec Retirement Fund, and do not purport to show the adequacy of the Fund to meet the obligations of the Hydro-Québec Retirement Plan, which are guaranteed by Hydro-Québec.

b) Investments are shown at cost, except for bonds, debentures and deep-discount investments which are shown at amortized cost.

c) Revenue from investments, contributions and benefits are accounted for on an accrual basis.

Note 2

Market value of investments

(in millions of dollars)	1986	1985
Bonds or debentures (par value of $1,420 million in 1986 and $1,328 million in 1985)	$1,526	$1,416
Common stock	276	130
Deep-discount investments	247	189
Other investments	5	8
Cash and short-term investments	276	280
	$2,330	$2,023

Note 3

Actuarial valuation

An independent actuarial valuation made in 1986 for purposes of financing the Retirement Fund showed a net surplus for the overall plan at December 31, 1985. The fund of the basic plan of the Retirement Fund showed a surplus, while the fund of the supplementary plans showed a deficit of $140 million. In conformity with the bylaws governing Hydro-Québec's retirement plan, Hydro-Québec will amortize this deficit over a maximum period of 15 years.

Previous actuarial valuations revealed excess special contributions paid in the 1982 through 1984 financial years. These contributions and related interest are accounted for by decreasing the assets of the Retirement Fund in the item Excess special contributions made by Hydro-Québec.

CORPORATE STRUCTURE

CONSTITUTION AND MANDATE

Hydro-Québec is a Québec government-owned corporation, established under and governed by legislation passed in 1944. Originally, its main role was to supply electricity in the Montréal region, previously served by two private electric utilities.

In 1963, Hydro-Québec acquired most remaining private electric utilities in Québec and was asked to establish a vast, integrated electrical generation, transmission and distribution system for the whole of Québec. The utility has since captured an increasingly large share of the Québec energy market: today, electricity accounts for more than 40% of Québec's total energy consumption.

In 1981, Hydro-Québec was transformed into a joint-stock company and its mandate once again broadened. Its principal role is still to supply Québec with electricity under the best possible conditions, but the utility is also responsible for carrying out research and promotion related to energy, energy transformation and conservation, and related fields.

SUBSIDIARIES AND AFFILIATES

Hydro-Québec has three wholly-owned subsidiaries. The Société d'énergie de la Baie James (SEBJ) manages Hydro-Québec's major construction projects. Hydro-Québec International (HQI) provides engineering and consulting services for electric power projects abroad. Cedars Rapids Transmission Company Limited (CRT) owns and operates an electrical transmission line between Hydro-Québec's Les Cèdres generating station and the Canada-U.S. border.

In addition, Hydro-Québec is a 34.2% shareholder in the Churchill Falls (Labrador) Corporation Limited (CFLCo), which operates the Churchill Falls generating station.

Hydro-Québec also owns 75.76% of the common shares of Nouveler Inc., a firm specializing in energy-utilization technologies and energy efficiency. In 1985, the utility acquired an interest in Electrolyser Inc. (33⅓%) and in HydrogenAL Inc., for the purpose of producing liquid hydrogen, as well as in ArgonAL Inc. for the production of liquid argon.

BOARD OF DIRECTORS

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Fiducie du Québec

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A. Hervé Hébert, Chairman
Guy Coulombe
*Jean-Paul Gignac**
*Pierre Goyette**
Pierre Leblanc
Claire Léger
*Jean-Joseph Villeneuve**

* *Appointed in 1986.*

** *Resigned December 23, 1986 and had not been replaced by the year end.*

PRINCIPAL OFFICERS
(at December 31, 1986)

President and Chief Executive Officer
Guy Coulombe

Executive Vice President,
External Markets
Jacques Guevremont

Executive Vice President,
Finance and Resources
(vacant)

Vice President,
Control
Michel Rhéaume

Vice President, Finance
and Treasurer
André Dubuc

Vice President,
Human Resources
Jean Houde

Excecutive Vice President,
Installations
Laurent Hamel

Executive Vice President,
Internal Markets
Claude Boivin

Executive Vice President,
Operations
Pierre Godin

Executive Vice President,
Technology, International
Affairs and IREQ
Benoît Michel

Vice President,
Corporate Planning
(vacant)

Vice President,
Information
Marcel Couture

General Auditor
Rollande Montsion

General Secretary
Jean Bernier

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(at December 31, 1986)

Société d'énergie de la Baie James

Chairman of the Board
Laurent Hamel

President and
Chief Executive Officer
Louis-Georges Boivin

Hydro-Québec International

Chairman of the Board
Benoît Michel

President and
Chief Executive Officer
André Gagnon

Cedars Rapids Transmission Company Limited

President
Jacques Guevremont

Nouveler Inc.

Chairman of the Board and
President and
Chief Executive Officer
Pierre Bolduc

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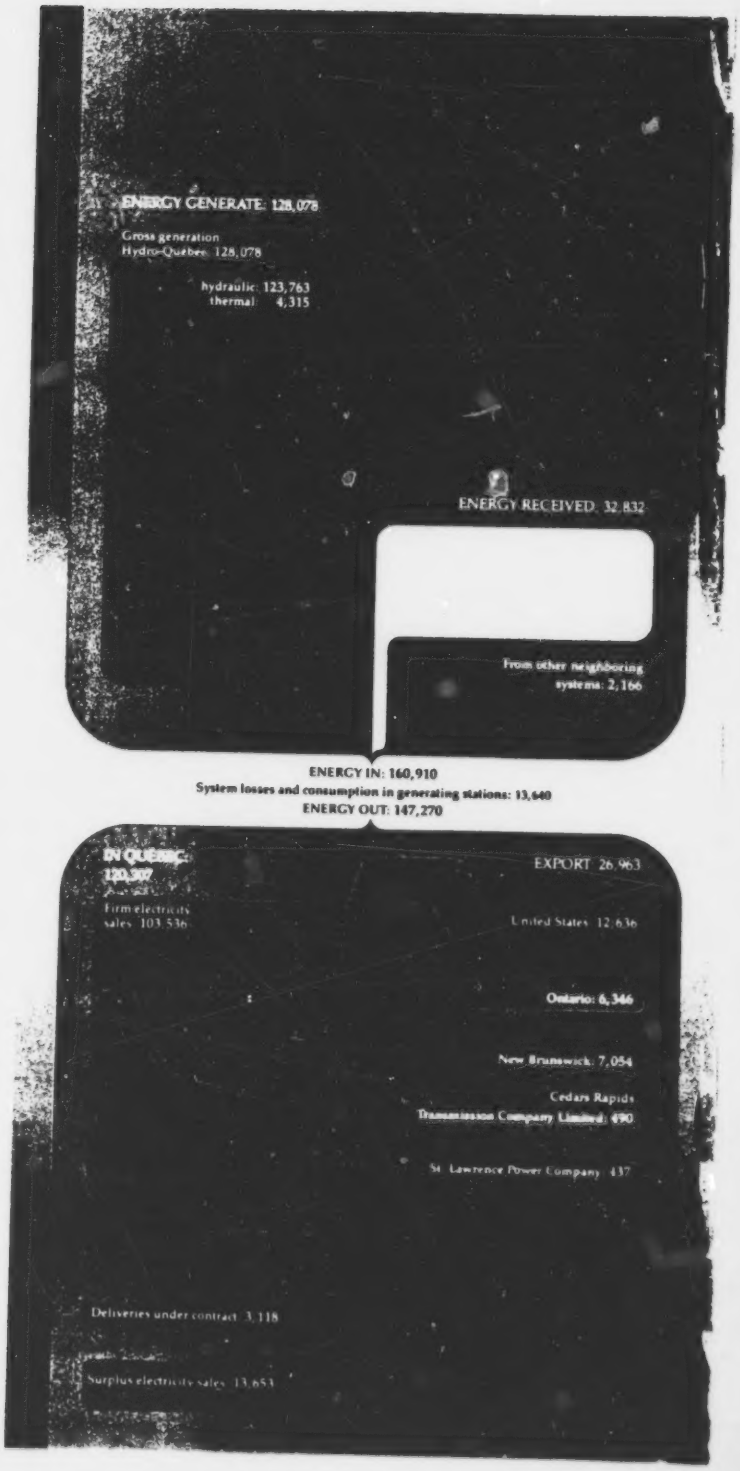
OPERATING DATA

Installed capacity
In 1986, the generating system expanded as a result of the commissioning of the last three units of the La Grande 4 generating station, the replacement of turbine wheels, and the acquisition of the Hart Jaune generating station. As of December 31, the utility's installed capacity totaled 24,475 megawatts. In addition, Hydro-Québec has access under contract to most of the generation of the Churchill Falls power plant, which has a nominal capacity of 5,225 megawatts.

Generation
Gross generation totaled 128.1 billion kilowatthours in 1986, an increase of 12.5 billion kilowatthours over 1985; 96.6% of this generation was hydroelectric. La Grande 2 alone accounted for 28.2% of overall generation. Gentilly 2 nuclear power station generated 4.1 billion kilowatthours.

Peak demand
Peak demand for priority needs on the system during the winter of 1986-1987 was recorded on Monday, January 26, 1987 at 8:00 a.m., when demand reached 23,219 megawatts, compared with 22,895 megawatts the previous winter.

Energy reserve
Runoff in 1986 was markedly higher than that of the preceding year although it was very close to the 10-year average, except in the St. Lawrence Valley, where the runoff index was 1.25. As of January 1, 1987, Hydro-Québec's reservoirs contained an energy reserve equivalent to 82.5 billion kilowatthours, an increase of 4.8 billion kilowatthours over the reserve in early 1986. This energy reserve represented 77% of the maximum capacity of reservoirs, which is currently 107 billion kilowatthours.



HYDRO-QUÉBEC GENERATING STATIONS

Generating Stations in Service	Installed Capacity (kW)
Hydroelectric	
La Grande 2	5 328 000
La Grande 1	2 106 300
La Grande 3	2 304 000
Beauharnois	1 639 000
Manic 5	1 292 000
Manic 3	1 183 200
Manic 2	1 015 200
Bersimis 1	912 000
Outardes 3	756 200
Bersimis 2	655 000
Carillon	654 300
Outardes 4	632 000
Outardes 2	433 900
Trenche	297 000
Beaumont	243 000
Paugan	229 475
La Tuque	220 000
Rapide Blanc	186 000
Manic 1	184 410
Shawinigan 2	173 100
Shawinigan 3	171 900
Les Cedres	162 000
Grand-Mere	149 575
Rapides des Iles	146 520
Chelsea	144 000
La Gabelle	136 380
Premiere Chute	124 200
Rapides Farmers	98 250
Rapides des Quinze	90 000
Chute des Chats	89 300
Bryson	61 000
Rapide 7	57 000
Hart Jaune	48 450
Rapide 2	48 000
Riviere des Prairies	47 200
Chute Hemmings	28 800
Hull 2	27 280
Sept Chutes	18 720
Saint-Narcisse	15 000
Drummondville	14 600
Mitis 1	6 400
Pont-Arnaud	5 450
Chute Bell	4 800
Mitis 2	4 250
Saint-Alban	3 000
Saint-Raphael	2 550
Sherbrooke	2 250
Chute Garneau	2 240
Corbeau	2 000
Magpie	1 800
Rawdon	1 720
Chute Burroughs	1 000
L'Assomption	400

	Installed Capacity (kW)
Thermal	
Steam	
Gentilly 2	675 000
Combustion turbine	
Tracy	600 000
Gas turbine	
La Citiere	200 880
Cadillac	162 000
Diesel units	
Iles de la Madeleine	39 330
Blanc-Sablon	7 200
La Tabatiere	4 700
Saint-Augustin	3 000
La Romaine	2 800
Kangiqsualujjuaq	2 400
Poste-de-la-Baleine	2 400
Natashquan	2 100
Port-Menier	2 100
Ile aux Grues	2 100
Povungnituk	1 800
Ile d'Entree	1 740
Inukjuak	1 620
Sallut	1 200
Kangiqsualujjuaq	1 030
Ivujivik	975
Kangiqsujuaq	820
Kangirsuk	750
Quaqtaq	665
Iohan-Beetz	605
Akulivik	600
Aupaluk	550
Tasiujaq	440

	Installed Capacity (kW)
Total installed capacity	
Hydroelectric generating stations	23 723 050
Thermal plants (25)	1 748 814
Total: 80 plants in operation as of December 31, 1986	24 471 800

Generating Station under Construction	Commissioning Date	Installed Capacity (kW)
Hydroelectric		
Manic 5 (additional capacity)	1989	480 000

CANADA
James Bay
Québec
Ontario
Labrador
Churchill Falls (5,225 MW)
New Brunswick
Nova Scotia
Newfoundland
North America
United States
Canada
Québec
United States